DOCUMENT RESUME

ED 111 857	TM 004 824
TITLE	Kentucky Educational Assessment Program 1974: Grade 11.
INSTITUTION	Kentucky State Dept. of Education, Frankfort. Div. of Evaluation.
PUB DATE	74
NOTE	203p.; For related documents, see TM 004 821, 822, 823 and ED 077 940 and 941, ED 081 793 and ED 093 917
EDRS PRICE	MF-$0.76 HC-$10.78 Plus Postage
DESCRIPTORS	Basic Skills; Citizenship; Data Analysis; *Educational Accountability; *Educational Assessment; Educational Needs; *Educational Objectives; Grade 11; Human Relations; Item Analysis; Sampling; Secondary Education; Self Concept; *State Programs; State Surveys; Student Attitudes; Test Results
IDENTIFIERS	*Kentucky Educational Assessment Program

ABSTRACT

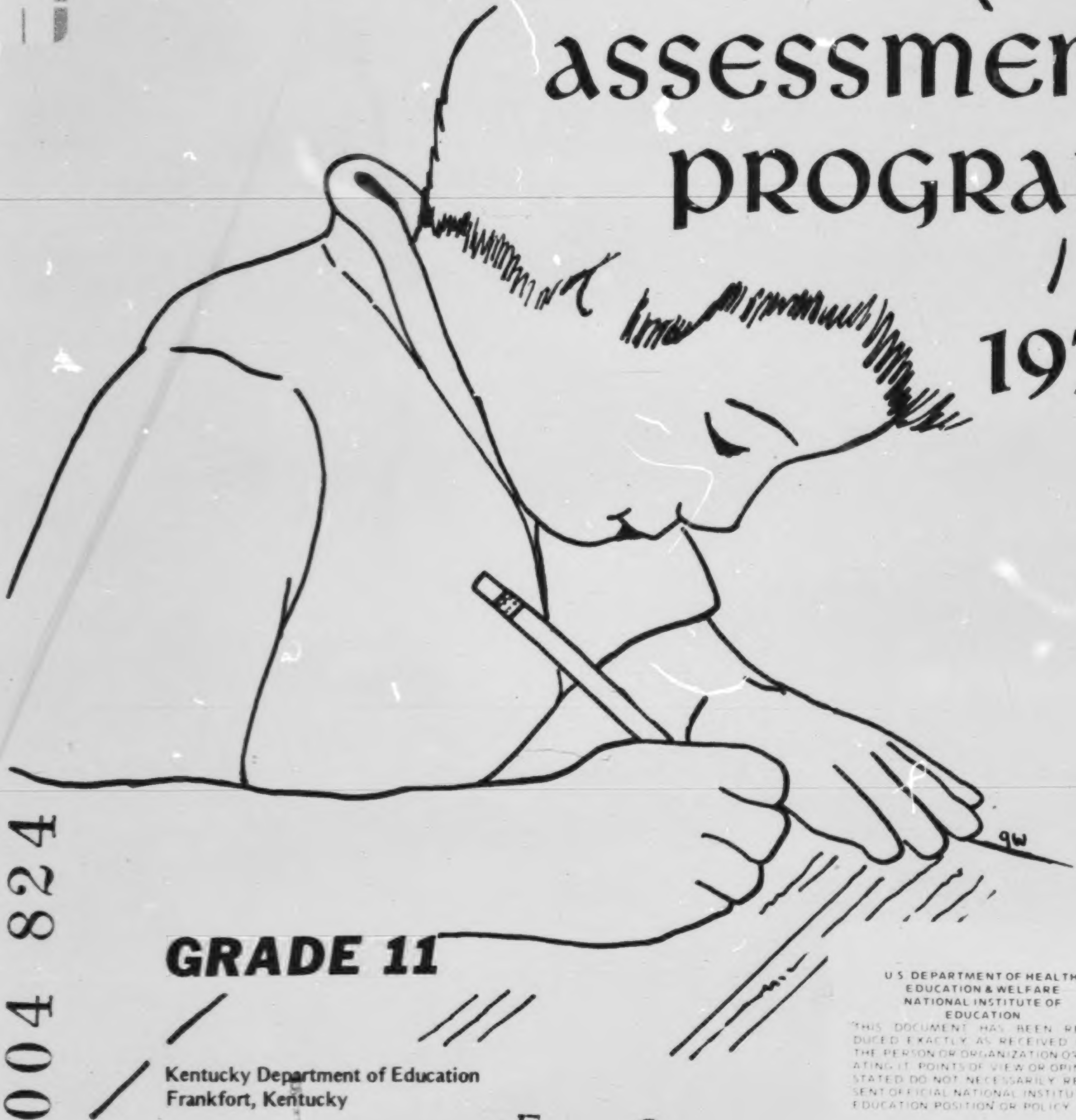
The Kentucky Educational Assessment Program is an ongoing effort to gather information regarding progress toward attainment of the educational goals for Kentucky citizens. Major emphasis is on the determination of the actual level of pupil performance in relation to desired performance. In the eleventh grade, relevant information was gathered in four goal areas: (1) General Education, (2) Human Relationships, (3) Citizenship, and (4) Physical and Mental Well Being. Recognizing that information attained through a statewide assessment program should be utilized for decision-making to improve educational programs, objectives, and goals, this assessment procedure was developed to be valid at three levels: local district, Educational Development District (EDD), and statewide. Regional and statewide assessment data are reported. (BJG)

****
* Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original. *
****

ED111857

kentucky educational assessment program

1974



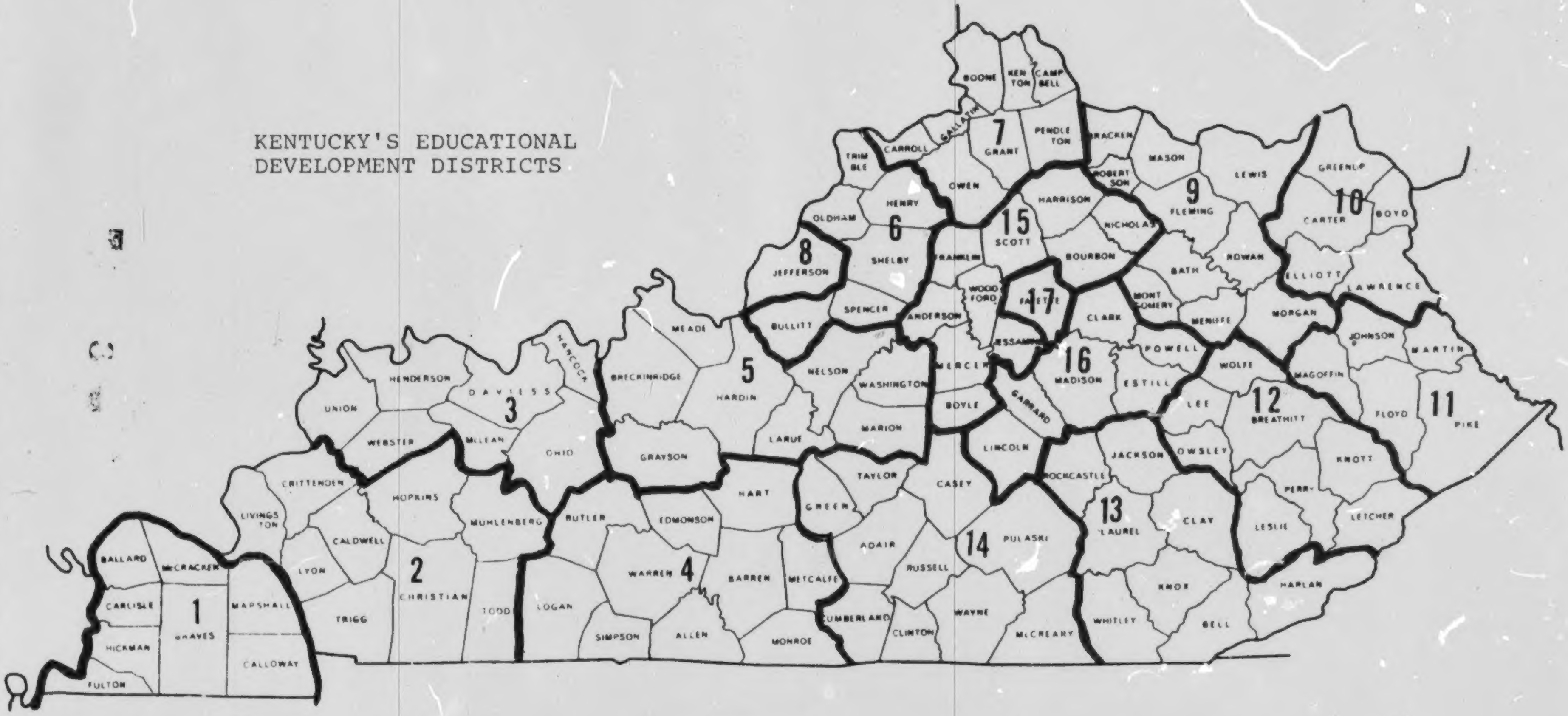
GRADE 11

Kentucky Department of Education
Frankfort, Kentucky

U S DEPARTMENT OF HEALTH.
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TM004 824

KENTUCKY'S EDUCATIONAL DEVELOPMENT DISTRICTS


BOONE
KEN TON
CAMP BELL
GALLATIN
CARROLL
7
GRANT
PENDLE TON
BRACKEN
MASON
LEWIS
GREENUP
10
CARTER
BOYD
TRIM BLE
OWEN
ROBERT SON
9
FLEMING
HENRY
HARRISON
OLDHAM
6
15
SCOTT
NICHOLAS
ROWAN
8
JEFFERSON
SHELBY
FRANKLIN
BOURBON
BATH
ELLIOTT
LAWRENCE
WOOD FORD
17
FAYETTE
MONT GOMERY
MENIFEE
MORGAN
SPENCER
ANDERSON
CLARK
BULLITT
JOHNSON
MARTIN
MEADE
HANCOCK
JESSAMINE
POWELL
WOLFE
MAGOFFIN
HENDERSON
DAVIESS
3
BRECKINRIDGE
5
HARDIN
NELSON
WASHINGTON
MERCER
16
MADISON
ESTILL
UNION
MCLEAN
OHIO
LARUE
BOYLE
GARRARD
LEE
12
BREATHITT
FLOYD
11
PIKE
WEBSTER
GRAYSON
MARION
LINCOLN
JACKSON
OWSLEY
KNOTT
CRITTENDEN
HOPKINS
HART
TAYLOR
CASEY
ROCKCASTLE
PERRY
LIVINGS TON
MUHLENBERG
BUTLER
EDMONSON
GREEN
13
LAUREL
CLAY
LESLIE
LETCHER
CALDWELL
ADAIR
14
PULASKI
BALLARD
MCCRACKEN
LYON
2
CHRISTIAN
WARREN
4
BARREN
METCALFE
RUSSELL
KNOX
HARLAN
1
CARLISLE
MARSHALL
TRIGG
TODD
LOGAN
CUMBERLAND
WAYNE
WHITLEY
BELL
GRAVES
HICKMAN
SIMPSON
ALLEN
MONROE
CLINTON
MCCREARY
CALLOWAY
FULTON

KENTUCKY EDUCATIONAL ASSESSMENT PROGRAM

TECHNICAL REPORT FOR ELEVENTH GRADE

Prepared by

Division of Evaluation
Office of Planning and Research

With the assistance of

personnel of the

Statewide Testing Program

and

Division of Computer Services

Lyman V. Ginger
Superintendent of Public Instruction

Kentucky Department of Education
Frankfort, Kentucky

1974

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF EDUCATION
FRANKFORT, KY. 40601

LYMAN V. GINGER
SUPERINTENDENT OF PUBLIC INSTRUCTION

Current economic conditions stress the imperative nature for the development of a comprehensive accountability program in Kentucky education. The ability to report concisely where we are and precisely where we are going continues to be a priority activity in the development of a credible model to sustain support of public education.

The Kentucky Department of Education is committed to a broad plan of action to move positively in the direction of accountability in education. With the adoption of _Goals of Education in Kentucky_ by the State Board, there exists the base from which a viable effort can be implemented with a comprehensive assessment program being a major component.

This report represents a continuing effort by the department to report to the public and educators the progress being made toward our goals. Further development and implementation of a comprehensive assessment plan will ultimately result in measurement of progress toward the achievement of all the goals of education throughout the state.

Lyman V. Ginger

CABINET MEMBERS

KENTUCKY STATE DEPARTMENT OF EDUCATION

Dr. Lyman V. Ginger	Superintendent of Public Instruction
Mr. Samuel M. Alexander	Deputy Superintendent for Public Instruction
Mr. Don C. Bale	Assistant Superintendent Bureau of Instruction
Mr. Ben F. Coffman	Assistant Superintendent Bureau of Rehabilitation Services
Dr. Arthur L. Cotterill	Head, Office of Planning and Research
Dr. Carl F. Lamar	Assistant Superintendent Bureau of Vocational Education
Mr. James P. Melton	Assistant Superintendent Bureau of Administration and Finance
Mr. Marshall E. Swain	Assistant Superintendent Bureau of Pupil Personnel Services
Mr. Frank Vittetow	Assistant Superintendent Bureau of Federal and State Relations

FOREWORD

The Kentucky Educational Assessment Program is an ongoing effort to gather information regarding progress toward attainment of the educational goals for Kentucky citizens. The source of the educational goals presented in this report is Goals of Education in Kentucky as published in 1973 by the Kentucky State Department of Education.

The reader should be aware that it is not feasible to conduct an assessment program for all of the educational goals for Kentucky citizens in a single year. Therefore, the 1974 assessment program focused upon predominant concerns determined from a survey of Kentucky citizens published in 1970 by the Kentucky State Department of Education. Those priority concerns included development of basic learning skills; development of knowledge and skills related to occupational competence; development of positive attitudes toward self, peers, school, reading, mathematics; and the development of positive attitudes toward citizenship. These concerns encompass five of the eight goal areas as set forth in the Goals of Education in Kentucky published in 1973. The goals are broad and general in nature; however, this is as it should be because it reflects long-range expectations. Specificity and detail were achieved through the development of objectives and the use of selected measurement items for assessing the status of pupil performance in relation to the priority developmental areas expressed in the composite goal.

It is recognized that a statewide assessment program can be justified only if the information obtained is utilized as the basis for decision-making to improve educational programs, objectives, and goals. Therefore, the assessment procedure was developed to be valid at three levels--local district, Educational Development District (EDD), and statewide. District level data were provided to the individual local districts sampled, while regional and statewide assessment data are reported within this document.

Analyses of the assessment data were performed at several levels. For example, in reading, results are reported for the general areas of reading vocabulary and reading comprehension, as well as for specific skills/concepts within these general areas. Additional detailed information is provided by the reporting of individual measurement item results contributing to score levels for the specific skills/concepts. Reporting of data in this manner provides the educator with the opportunity to analyze local district results, as well as regional and statewide results at several levels in each developmental area described by the broad goal. The extent to which state, regional, and local educators find the present document to be useful in this regard will provide a measure of success of the Kentucky Educational Assessment Program.

TABLE OF CONTENTS

Page

LIST OF TABLES xi

LIST OF FIGURES xvii

INTRODUCTION 1

Performance Objective 1
Learner Needs 3

STATEWIDE ASSESSMENT RESULTS 5

Goal Area I: General Education 5
1.1 Reading 5
1.1 Language 9
1.1 Arithmetic 13
1.1 Study Skills 19
Statewide Profiles--General Education Goals 22
1.7 Attitude toward School 27
1.7 Attitude toward Reading 28
1.7 Attitude toward Arithmetic 30

Goal Area III: Human Relationships 33
3.2 Attitude toward Peers 33

Goal Area IV: Citizenship 35
4.3 Attitude toward Citizenship 35

Goal Area VI: Physical and Mental Well Being 38
6.3 Attitude toward Self 38

Statewide Profile--Attitudinal Goals 39

ASSESSMENT RESULTS FOR EDUCATIONAL DEVELOPMENT DISTRICTS 41

Goal Area I: General Education 41
1.1 Reading 41
1.1 Language 61
1.1 Arithmetic 79
1.1 Study Skills 111
1.7 Attitude toward School 127
1.7 Attitude toward Reading 129
1.7 Attitude toward Arithmetic 131

Goal Area III: Human Relationships 133
3.2 Attitude toward Peers 133

Goal Area IV: Citizenship 136
4.3 Attitude toward Citizenship 136

TABLE OF CONTENTS (continued)

Page

Goal Area VI: Physical and Mental Well Being 139
6.3 Attitude toward Self 139

LIST OF REFERENCES 141

APPENDIX A: GOALS OF EDUCATION IN KENTUCKY 143

APPENDIX B: HIERARCHY OF GOALS AND PERFORMANCE OBJECTIVES 149

APPENDIX C: KENTUCKY STUDENT ATTITUDE INVENTORY 159

APPENDIX D: SAMPLING PROCEDURES AND SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT, EDUCATIONAL DEVELOPMENT DISTRICT, AND STATEWIDE 167

APPENDIX E: RESULTS FOR ANALYSIS OF DATA FOR BOYS AND FOR GIRLS . . 175

APPENDIX F: ITEM ANALYSIS RESULTS BY SKILL/CONCEPT 183

LIST OF TABLES

Table Page

1 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Knowledge of Vocabulary 42

2 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Knowledge of the Meaning of Words in Context 44

3 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Reading Comprehension 46

4 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension (Paraphrasing) of the Meaning of Ideas 48

5 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Main Ideas 50

6 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Relationships 52

7 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension (Draw Conclusions) of Given Facts and Statements 54

8 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension (Inference) of Contextual Clues 56

9 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Analysis of Indefinite or Incomplete Statements (Extended Meaning) 58

10 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Analysis of the Tone, Mood, and Intention of the Author 60

11 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Knowledge of Spelling 62

12 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Knowledge of Correctly and Incorrectly Spelled Words 64

13 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Application of the Mechanics of Language 66

LIST OF TABLES (continued)

Table Page

14 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Punctuation Skills 68

15 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Capitalization Skills 70

16 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Application of Language Expression 72

17 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Correct Grammatical Usage 74

18 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Clarity and/or Economy of Expression 76

19 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of the Author's Intention (Word Choice) 78

20 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Application of Arithmetic Computation 80

21 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Addition Skills 82

22 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Subtraction Skills 84

23 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Multiplication Skills 86

24 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Application of Division Skills 88

25 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Comprehension of Arithmetic Concepts 90

26 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Knowledge of Arithmetic Concepts 92

LIST OF TABLES (continued)

Table Page

27 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Arithmetic Concepts (Converting Form) 94

28 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Equations 96

29 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Comparative Relationships 98

30 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Analysis of the Components of Arithmetic Problems (Organization) 100

31 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Application of Skills in Solving Arithmetic Word Problems 102

32 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Relationships (Ratio, Time, Part-Whole, Sequence, Geometric) . . . 104

33 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Problem-Solving (Selecting Methods) 106

34 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Problem-Solving (Correct Solution) 108

35 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Analysis of the Components of Arithmetic Word Problems 110

36 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Knowledge of Reference Material Techniques 112

37 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Knowledge of Dictionary Use 114

38 Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Knowledge of Library Use 116

39 Average Grade Equivalent Scores and the Percentage of Eleventh Grade Pupils Meeting the Criterion by Educational Development District for Comprehension of Graphic Materials 118

LIST OF TABLES (continued)

Table		Page
40	Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Symbols, Legends, and Data Presented in Graphic and Tabular Form	120
41	Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension of Relationships Presented in Graphical Form	122
42	Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Comprehension (Draw Conclusions) of Graphic Data	124
43	Average Percentage of Correct Answers by Educational Development District for Eleventh Grade Pupils' Analysis of Graphic Data and Determination of Extended Meaning	126
44	Percentage of Eleventh Grade Pupils Responding Positively to the Individual Statements Related to Attitude toward School by Educational Development District	128
45	Percentage of Eleventh Grade Pupils Responding Positively to the Individual Statements Related to Attitude toward Reading by Educational Development District	130
46	Percentage of Eleventh Grade Pupils Responding Positively to the Individual Statements Related to Attitude toward Arithmetic by Educational Development District	132
47	Percentage of Eleventh Grade Pupils Responding Positively to the Individual Statements Related to Attitude toward Peers by Educational Development District	135
48	Percentage of Eleventh Grade Pupils Responding Positively to the Individual Statements Related to Attitude toward Citizenship by Educational Development District	138
49	Percentage of Eleventh Grade Pupils Responding Positively to the Individual Statements Related to Attitude toward Self by Educational Development District	140
50	Eleventh Grade Sample Size by Participating School District and Educational Development District	170
51	Average Grade Equivalency Scores in Reading for Eleventh Grade Pupils by Sex and Educational Development District	177
52	Average Grade Equivalency Scores in Language for Eleventh Grade Pupils by Sex and Educational Development District	178
53	Average Grade Equivalency Scores in Arithmetic for Eleventh Grade Pupils by Sex and Educational Development District	179

LIST OF TABLES (continued)

Table		Page
54	Average Grade Equivalency Scores in Study Skills for Eleventh Grade Pupils by Sex and Educational Development District	180
55	Statewide Percentage of Positive Response for Eleventh Grade Pupils by Sex for Attitudinal Statements	181
56	Reading Vocabulary Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	185
57	Reading Comprehension Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	187
58	Language/Spelling Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	189
59	Language Mechanics Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	190
60	Language Expression Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	191
61	Arithmetic Computation Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	192
62	Arithmetic Concepts Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	194
63	Arithmetic Applications Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	195
64	Study Skills/Reference Materials Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	196
65	Study Skills/Graphic Materials Item Analysis Information--Percentage Correct by Educational Development District for Eleventh Grade	197

LIST OF FIGURES

Figure Page

1 Goal and Objective Numbering 2

2 Learner Need 3

3 Average Grade Equivalent Profile and Measurement Parameters of Eleventh Grade Pupils, Statewide, for the Basic Skill Areas as Measured by the Comprehensive Tests of Basic Skills, Form Q, Level 4 24

4 Percentage Profile of Eleventh Grade Pupils, Statewide, Meeting the Criterion in Basic Skill Areas as Measured by the Comprehensive Tests of Basic Skills, Form Q, Level 4 26

5 Average Percentage Profile of Eleventh Grade Pupils, Statewide, Meeting the Criterion in Attitudinal Areas as Measured by the Kentucky Student Attitude Inventory 40

INTRODUCTION

The major emphasis of the Kentucky Educational Assessment Program was to determine the actual level of performance of Kentucky pupils in relation to desired performance. The purpose of the assessment activities was to provide preliminary answers to the question: "Are Kentucky pupils doing as well as expected?"

In the eleventh grade, relevant information was gathered in four of the eight goal areas which were established in 1973. They were:

Goal Area I:	General Education
Goal Area III:	Human Relationships
Goal Area IV:	Citizenship
Goal Area VI:	Physical and Mental Well Being

A summary of the Goals of Education in Kentucky is provided in Appendix A.

To measure performance within the goal areas, two concepts were employed which reflect current thinking in the area of educational assessment. These concepts are the development of performance objectives and the identification of learner needs.

Performance Objective

A performance objective is a statement that expresses the performance level of expected behavior for a pupil or pupils in regard to a selected area of concern and measurement instrument. Performance objectives provide for the determination of actual pupil attainment in regard to expectations of pupil attainment by providing a criterion and other specific information necessary for determining progress toward meeting educational goals.

Example Performance Objective

> During the spring semester of 1974, Kentucky pupils will demonstrate reading comprehension by attaining an average grade equivalent score equal to or exceeding the criterion

as measured by the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills.

Performance objectives for the 1974 Kentucky Educational Assessment Program were developed for individual skills/concepts within the general assessment areas. Numbers assigned to individual performance objectives reflect their position within a goal/objective hierarchy. Figure 1 illustrates the numbering system utilized.

GOAL AREA 1.0

Goal 1.1
    Performance Objective 1.1.1 -- General area
    Performance Objective 1.1.1.1 }
    Performance Objective 1.1.1.2 } Specific skills/concepts
    Performance Objective 1.1.1.3 }

FIGURE 1

GOAL AND OBJECTIVE NUMBERING

A complete list of the goals and related performance objectives used in the study is presented in Appendix B.

In developing the performance objectives for the assessment program, key terms described the behaviors measured by the objectives. These terms and definitions are:[1]

KNOWLEDGE	Involves the recognition and recall of facts (e.g., defining terms, recalling names, dates, persons, identifying words, etc.).
COMPREHENSION	The learner interprets, translates, summarizes, or paraphrases given material. The person can organize the material into another language or form of communication (e.g., reading a book or musical scores, grasping the thought of material studied, ability to describe something in one's own words, etc.).

---

[1] Benjamin S. Bloom, et al., Taxonomy of Educational Objectives, Handbook I: Cognitive Domain (New York: David McKay Company, Inc., 1956).

David R. Krathwohl, et al., Taxonomy of Educational Objectives, Handbook II: Affective Domain (New York: David McKay Company, Inc., 1956).

APPLICATION	Involves the use of material in a situation which is different from that situation in which it was originally learned (e.g., the use of abstract ideas, principles, or theories in problem-solving).
ANALYSIS	Involves separating a complex entity into its parts, drawing comparisons and relationships between the elements (e.g., ability to recognize assumptions, to distinguish cause and effect relationships, reorganization of biases or points of view, etc.).
RESPOND	Involves the indication of affective behavior consistent with given expectations in a defined situation.

In addition to describing behavior, each objective specified a measurement instrument which assessed the behavior. Two test instruments were utilized in the 1974 Kentucky Educational Assessment Program for eleventh grade. The Comprehensive Tests of Basic Skills, Form Q, Level 4, were used as the measurement device for the performance objectives dealing with cognitive behavior and the Kentucky Student Attitude Inventory (see Appendix D) was employed as the measurement instrument for attitudinal objectives.

Learner Needs

A learner need is identified when actual pupil performance is below expected pupil performance as measured by a specific instrument. Figure 2 illustrates the concept of a learner need.

Expected performance minus Actual performance equals Results below expectation equals Learner need

FIGURE 2

LEARNER NEED

The identification of a learner need serves to indicate those areas in which pupils are not meeting expectations. Additional data should be collected and analyzed to determine the degree of need and the causes for the existence of learner needs. It should be recognized that the interaction of many factors (variables) contribute to indications of learner needs. A detailed examination of these factors is an essential step in the comprehensive assessment of educational programs.

In order to gather meaningful data describing educational performance for identification of indicated learner needs at the district, regional, and statewide levels, random sampling techniques were employed for selecting districts and pupils to participate. A description of the sampling procedures and a list of participating districts including the number of pupils tested are provided in Appendix C.

STATEWIDE ASSESSMENT RESULTS

A summary of results for Kentucky pupils is provided in the current section. Actual attainment levels in relation to expected attainment levels are presented for general skill areas and specific skills/concepts by goal area. In addition, sample assessment items are provided for the general skill areas. In those instances where the results for boys differed markedly from the results for girls, additional data pointing out the differences are reported. Data tables indicating results for boys and for girls are presented in Appendix E. Item analysis results organized by skills/concepts are provided in Appendix F.

GOAL AREA I: GENERAL EDUCATION

Goal 1.1: Each citizen of the Commonwealth should be assured an opportunity to realize his full potential in written and oral communication, reading, computation, and mathematical concepts.

The general education goal was assessed in the areas of (1) reading, (2) language, (3) arithmetic, and (4) study skills using the Comprehensive Tests of Basic Skills, Form Q, Level 4. A criterion of 11.7 grade equivalency was established as the level of desired performance. The results for Goal 1.1 are presented below.

Reading

Reading Vocabulary

Performance Objective 1.1.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of vocabulary by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Reading Vocabulary Subtests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Reading Vocabulary

Test Situation: Pupils were asked to choose the word which had about the same meaning as the underlined word.

Item: give the test

a. make
b. take
c. require
d. administer

Results

For the statewide sample, 33 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency and the statewide average grade equivalent score was 10.2.

Specific Skills/Concepts Related to Knowledge of Reading Vocabulary

The average percentage of correct items for the 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept Area 1.

1.1.1.1 Knowledge of the Meaning of Words in Context

The expected criterion level for eleventh grade pupils was established as 69 percent. The average percentage of correct items for the eleventh grade statewide sample was 68 percent.

Reading Comprehension

Performance Objective 1.1.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate reading comprehension by attaining an average equivalent score equal to or exceeding the criterion (11.7) as measured by the Reading Comprehension Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Reading Comprehension

Test Situation: Pupils were asked to read written material and choose the best answer to questions relating to that material.

Item: (An article about ants) Ant societies are divided into

a. two castes
b. three castes
c. four castes
d. five castes

Conclusion--Reading Results

Two areas related to the achievement of Kentucky pupils in reading were assessed statewide at the eleventh grade level:

1. Knowledge of vocabulary
2. Reading comprehension

Knowledge of Vocabulary

The assessment results indicate a learner need for eleventh grade pupils in knowledge of vocabulary as well as for the related skill/concern of knowledge of the meaning of words in context.

Reading Comprehension

The criterion of an average 11.7 grade equivalency was not attained. Consequently, a learner need was indicated.

It is noted that the expected criteria were attained for each number of related skills/concepts concerning:

1. comprehension of the meaning of ideas.
2. comprehension of relationships.
3. comprehension of given facts and statements.
4. comprehension of contextual clues.
5. analysis of indefinite or incomplete statements.
6. analysis of the tone, mood, and intention of the author.

Item analysis data, listed by reading skill/concept for individual Educational Development Districts, as well as statewide, may be reviewed in Appendix F. Reading results by Educational Development District for reading subtests and individual skills/concepts are provided in a later section of the present report.

Results

For the statewide sample, 44 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.6.

Specific Skills/Concepts Related to Reading Comprehension

1.1.2.1 Comprehension (Paraphrasing) of the Meaning of Ideas

The expected criterion level for eleventh grade pupils was established as 78 percent. The average percentage of correct items for the eleventh grade statewide sample was 80 percent.

1.1.2.2 Comprehension of Main Ideas

The expected criterion level for eleventh grade pupils was established as 74 percent. The average percentage of correct items for the eleventh grade statewide sample was 74 percent.

1.1.2.3 Comprehension of Relationships

The expected criterion level for eleventh grade pupils was established as 72 percent. The average percentage of correct items for the eleventh grade statewide sample was 74 percent.

1.1.2.4 Comprehension (Draw Conclusions) of Given Facts and Statements

The expected criterion level for eleventh grade pupils was established as 61 percent. The average percentage of correct items for the eleventh grade statewide sample was 66 percent.

1.1.2.5 Comprehension (Inference) of Contextual Clues

The expected criterion level for eleventh grade pupils was established as 63 percent. The average percentage of correct items for the eleventh grade statewide sample was 67 percent.

1.1.2.6 Analysis of Indefinite or Incomplete Statements (Extended Meaning)

The expected criterion level for eleventh grade pupils was established as 59 percent. The average percentage of correct items for the eleventh grade statewide sample was 61 percent.

1.1.2.7 Analysis of the Tone, Mood, and Intention of the Author

The expected criterion level for eleventh grade pupils was established as 59 percent. The average percentage of correct items for the eleventh grade statewide sample was 59 percent.

Language

Spelling

Performance Objective 1.1.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of spelling by attaining an average equivalent score equal to or exceeding the criterion (11.7) as measured by the Language/Spelling Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Spelling

Test Situation: Pupils were asked to choose from a group of words the word which was spelled incorrectly. If all the words were spelled correctly, "none" was marked.

Item:
a. postscript
b. hevily
c. luncheon
d. revised
e. "none"

Results

For the statewide sample, 42 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.6.

Specific Skills/Concepts Related to Knowledge of Spelling

1.1.3.1 Knowledge of Correctly or Incorrectly Spelled Words

The expected criterion level for eleventh grade pupils was established as 67 percent. The average percentage of correct items for the eleventh grade statewide sample was 66 percent.

Mechanics of Language

Performance Objective 1.1.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of the mechanics of language by attaining on average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of the Mechanics of Language

Test Situation: Pupils were asked to choose the answer which used the best punctuation for an underlined part in a sentence. "Best as it is" was chosen if the underlined part was punctuated correctly.

Item: Tom is going to race, his car.

a. race. His
b. race his
c. race; his
d. race-his
e. best as it is

Test Situation: Pupils were also asked to find the mistakes in capitalization in underlined parts of sentences. If there were no mistakes in capitalization, "none" was marked.

Item: a. Jack was
b. taken to
c. bay Memorial
d. hospital today.
e. "none"

Results

For the statewide sample, 42 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.6.

Specific Skills/Concepts Related to Application of the Mechanics of Language

1.1.4.1 Application of Punctuation Skills

The expected criterion level for eleventh grade pupils was established as 71 percent. The average percentage of correct items for the eleventh grade statewide sample was 71 percent.

1.1.4.2 Application of Capitalization Skills

The expected criterion level for eleventh grade pupils was established as 62 percent. The average percentage of correct items for the eleventh grade statewide sample was 67 percent.

Language Expressions

Performance Objective 1.1.5

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of language expression by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Language Expression

Test Situation: Pupils were asked to choose the word or words to fill a blank in a sentence which best expressed the idea presented.

Item: The happy girls _____ as they walked down the street.

a. walked
b. laughed
c. cried
d. stalked

Results

For the statewide sample, 42 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.2.

Specific Skills/Concepts Related to Application of Language Expression

1.1.5.1 Application of Correct Grammatical Usage

The expected criterion level for eleventh grade pupils was established as 74 percent. The average percentage of correct items for the eleventh grade statewide sample was 73 percent.

1.1.5.2 Comprehension of Clarity and/or Economy of Expression

The expected criterion level for eleventh grade pupils was established as 59 percent. The average percentage of correct items for the eleventh grade statewide sample was 59 percent.

1.1.5.3 Comprehension of the Author's Intention (Word Choice)

The expected criterion level for eleventh grade pupils was established as 71 percent. The average percentage of correct items for the eleventh grade statewide sample was 70 percent.

Conclusions--Language Results

Three areas related to the achievement of Kentucky pupils in language were assessed statewide at the eleventh grade level:

1. Knowledge of spelling
2. Application of the mechanics of language
3. Application of language expression

Knowledge of Spelling

The assessment results provide evidence of a learner need for eleventh grade pupils in knowledge of spelling as well as for the related skill/concept of knowledge of correctly and incorrectly spelled words.

Application of the Mechanics of Language

The criterion of an average 11.7 grade equivalency was not attained. Consequently, a learner need was indicated.

However, the compiled results indicate that the desired criterion was met for the related skills/concept concerned with application of punctuation skills and application of capitalization skills.

Application of Language Expression

The pupil performance data for application of language expression indicate the existence of a learner need. Additional supporting evidence of this learner need is documented by the lack of attainment of the specified criterion in the related skills/concepts of:

1. application of correct grammatical usage.
2. comprehension of the author's implication.

Item analysis data, listed by language skills/concepts for individual Educational Development Districts, as well as statewide, may be reviewed in Appendix F. Language results by Educational Development District for language subtests and individual skills/concepts are provided in a later section of the present report.

Arithmetic

Arithmetic Computation

Performance Objective 1.1.6

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of arithmetic computation by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Arithmetic Computation

Test Situation: Pupils were asked to choose the correct answer to problems of addition, subtraction, multiplication, and division.

Item: $40 \overline{)160}$

a. 14
b. 2
c. 4
d. 5

Results

For the statewide sample, 33 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.1.

Specific Skills/Concepts Related to Application of Arithmetic Computation

1.1.6.1 Application of Addition Skills

The expected criterion level for eleventh grade pupils was established as 76 percent. The average percentage of correct items for the eleventh grade statewide sample was 71 percent.

1.1.6.2 Application of Subtraction Skills

The expected criterion level for eleventh grade pupils was established as 72 percent. The average percentage of correct items for the eleventh grade statewide sample was 68 percent.

1.1.6.3 Application of Multiplication Skills

The expected criterion level for eleventh grade pupils was established as 79 percent. The average percentage of correct items for the eleventh grade statewide sample was 74 percent.

1.1.6.4 Application of Division Skills

The expected criterion level for eleventh grade pupils was established as 72 percent. The average percentage of correct items for the eleventh grade statewide sample was 67 percent.

Arithmetic Concepts

Performance Objective 1.1.7

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of arithmetic concepts by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Arithmetic Concepts

Test Situation: Pupils were asked to choose the correct answer to questions related to various arithmetic concepts.

Item: The $\sqrt{16}$ is equal to which of the following?

a. 8
b. 4
c. 64
d. 32

Results

For the statewide sample, 37 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.5

Specific Skills/Concepts Related to Comprehension of Arithmetic Concepts

1.1.7.1 Knowledge of Arithmetic Concepts

The expected criterion level for eleventh grade pupils was established as 60 percent. The average percentage of correct items for the eleventh grade statewide sample was 61 percent.

1.1.7.2 Comprehension of Arithmetic Concepts (Converting Form)

The expected criterion level for eleventh grade pupils was established as 70 percent. The average percentage of correct items for the eleventh grade statewide sample was 68 percent.

1.1.7.3 Comprehension of Equations

The expected criterion level for eleventh grade pupils was established as 65 percent. The average percentage of correct items for the eleventh grade statewide sample was 63 percent.

1.1.7.4 Comprehension of Comparative Relationships

The expected criterion level for eleventh grade pupils was established as 82 percent. The average percentage of correct items for the eleventh grade statewide sample was 81 percent.

1.1.7.5 Analysis of the Components of Arithmetic Problems Organization

The expected criterion level for eleventh grade pupils was established as 66 percent. The average percentage of correct items for the eleventh grade statewide sample was 64 percent.

Arithmetic Applications

Performance Objectives 1.1.8

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of skills in solving arithmetic word problems by attaining an average grade **equivalent** score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Skills in Solving Arithmetic Word Problems

Test Situation: Pupils were asked to read arithmetic word problems and choose the correct solution to these problems.

Item: Dick's room has an area of 10 square feet. How many square inches is the area of his room?

a. 154
b. 120
c. 1440
d. 1200

Results

For the statewide sample, 36 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.3.

Specific Skills/Concepts Related to Application of Skills in Solving Arithmetic Word Problems

1.1.8.1 Comprehension of Relationships (Ratio, Time, Part/Whole, Sequence, Geometric)

The expected criterion level for eleventh grade pupils was established as 78 percent. The average percentage of correct items for the eleventh grade statewide sample was 75 percent.

1.1.8.2 Comprehension of Problem-Solving (Selecting Methods)

The expected criterion level for eleventh grade pupils was established as 71 percent. The average percentage of correct items for the eleventh grade statewide sample was 68 percent.

1.1.8.3 Comprehension of Problem-Solving (Correct Solutions)

The expected criterion level for eleventh grade pupils was established as 61 percent. The average percentage of correct items for the eleventh grade statewide sample was 62 percent.

1.1.8.4 Analysis of the Components of Arithmetic Word Problems

The expected criterion level for eleventh grade pupils was established as 65 percent. The average percentage of correct items for the eleventh grade statewide sample was 63 percent.

Conclusions--Arithmetic Results

Three areas related to the achievement of Kentucky pupils in arithmetic were assessed statewide at the eleventh grade level:

1. Application of arithmetic computation
2. Comprehension of arithmetic concepts
3. Application of skills in solving arithmetic word problems

Application of Arithmetic Computation

The pupil performance data for arithmetic computation indicate the existence of learner need. Additional supporting evidence of this learner need is documented by the lack of attainment of the specified criterion in the related skills/concepts of:

1. application of additional skills.
2. application of subtraction skills.
3. application of multiplication skills.
4. application of division skills.

Comprehension of Arithmetic Concepts

The criterion of an average 11.7 grade equivalency was not attained. Consequently, a learner need was indicated.

In addition, the assessment results provide evidence of learner needs for the following skills/concepts related to comprehension of arithmetic concepts:

1. Comprehension of arithmetic concepts
2. Comprehension of equations
3. Comprehension of comparative relationships
4. Analysis of the components of arithmetic word problems

It is noted that the expected criterion was attained for the related skill/concept concerning knowledge of arithmetic concepts.

Application of Skills in Solving Arithmetic Word Problems

The assessment results for application of skills in solving arithmetic word problems provide evidence of a learner need for eleventh grade pupils. Additional supporting data indicating learner needs in this area are documented for the following related skill/concept areas:

1. Comprehension of relationships (ratio, time, part/whole, sequence, geometric)
2. Comprehension of problem-solving (selecting methods)
3. Analysis of the components of arithmetic word problems (organization)

It is noted that the expected criterion was met for the related skill concepts of comprehension of problem-solving (correct solutions).

Item analysis data, listed by arithmetic skills/concepts for individual Educational Development Districts, as well as statewide, may be reviewed in Appendix F. Arithmetic results by Educational Development District for arithmetic subtests and individual skills/concepts are provided in a later section of the present report.

Study Skills

Reference Materials

Performance Objective 1.1.9

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of reference material techniques by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Study Skills/Reference Materials Subtests of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Reference Material Techniques

Test Situation: Pupils were asked to read various reference materials and choose the correct answer to questions relating to these materials.

Item: (dictionary entry) How many of the definitions given for the word "express" are verbs?

a. two
b. four
c. six
d. eight

Results

For the statewide sample, 35 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.2.

Specific Skills/Concepts Related to Knowledge of Reference Material Techniques

1.1.9.1 Knowledge of Dictionary Use

The expected criterion level for eleventh grade pupils was established as 77 percent. The average percentage of correct items for the eleventh grade statewide sample was 75 percent.

1.1.9.2 Knowledge of Library Use

The expected criterion level for eleventh grade pupils was established as 69 percent. The average percentage of correct items for the eleventh grade statewide sample was 66 percent.

Graphic Material

Performance Objective 1.1.10

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of graphic materials by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Graphic Materials

Test Situation: Pupils were asked to look at and to use various graphic materials and choose correct answers to questions relating to the material.

Item: (Graph presenting the average income levels by areas in Kentucky) Which area had the greatest income level from 1965-1970?

a. Area I
b. Area II
c. Area III
d. Area IV

Results

For the statewide sample, 39 percent of the eleventh grade pupils attained the criterion of 11.7 grade equivalency, and the statewide average grade equivalent score was 10.1.

Specific Skills/Concepts Related to Comprehension of Graphic Materials

1.1.10.1 Comprehension of Symbols, Legends, and Data Presented in Graphic and Tabular Form

The expected criterion level for eleventh grade pupils was established as 55 percent. The average percentage of correct items for the eleventh grade statewide sample was 53 percent.

1.1.10.2 Comprehension of Relationships Presented in Graphical Form

The expected criterion level for eleventh grade pupils was established as 68 percent. The average percentage of correct items for the eleventh grade statewide sample was 67 percent.

1.1.10.3 Comprehension (Draw Conclusions) of Graphic Data

The expected criterion level for eleventh grade pupils was established as 52 percent. The average percentage of correct items for the eleventh grade statewide sample was 59 percent.

1.1.10.4 Analysis of Graphic Data to Determine Extended Meaning

The expected criterion level for eleventh grade pupils was established as 58 percent. The average percentage of correct items for the eleventh grade statewide sample was 56 percent.

Conclusions--Study Skills Results

Two areas related to the achievement of Kentucky pupils in study skills were assessed statewide at the eleventh grade level:

1. Knowledge of reference material techniques
2. Comprehension of graphic materials

Knowledge of Reference Material Techniques

The criterion of 11.7 was not attained by Kentucky pupils. Therefore, a learner need was evidenced for knowledge of reference material techniques. The compiled results indicate that the desired criteria were not met for the related skills/concepts of:

1. knowledge of dictionary use.
2. knowledge of library use.

Comprehension of Graphic Materials

The pupil performance data for comprehension of graphic materials indicate the existence of a learner need. Additional supporting evidence of this learner need is documented by the lack of attainment of the specified criteria in the related skills/concepts of:

1. comprehension of symbols, legends, and data presented in graphic and tabular form.
2. comprehension of relationships presented in graphical form.
3. analysis of graphic data to determine extended meaning.

It is noted that the expected criterion was attained for the related skill/concept concerning comprehension (draw conclusions) of graphic data.

Item analysis data, listed by study skills/concepts for individual Educational Development Districts, as well as statewide, may be reviewed in Appendix F. Study skill results by Educational Development District for study skills subtests and individual skills/concepts are presented in a later section of the present report.

Statewide Profiles--General Education Goals

The assessment results for the basic skill areas are described on the following pages in statewide profiles. Results encompassing the areas of reading, language, arithmetic, and study skills are illustrated.

The following information is provided in Figure 3.

1. Desired criterion level as indicated by the dotted line.
2. Average grade equivalent score attained by the pupil sample indicated by a dot.
3. Parameters of the major clustering of pupil scores as indicated by the shaded bar.

Due to measurement error, which occurs in any measurement of student performance, it is noted that the true average grade equivalent score for the sample group will vary from the reported average grade equivalent score and would be positioned within the limits delineated for each subtest area by the shaded bar representing the major clustering of individual pupil scores.

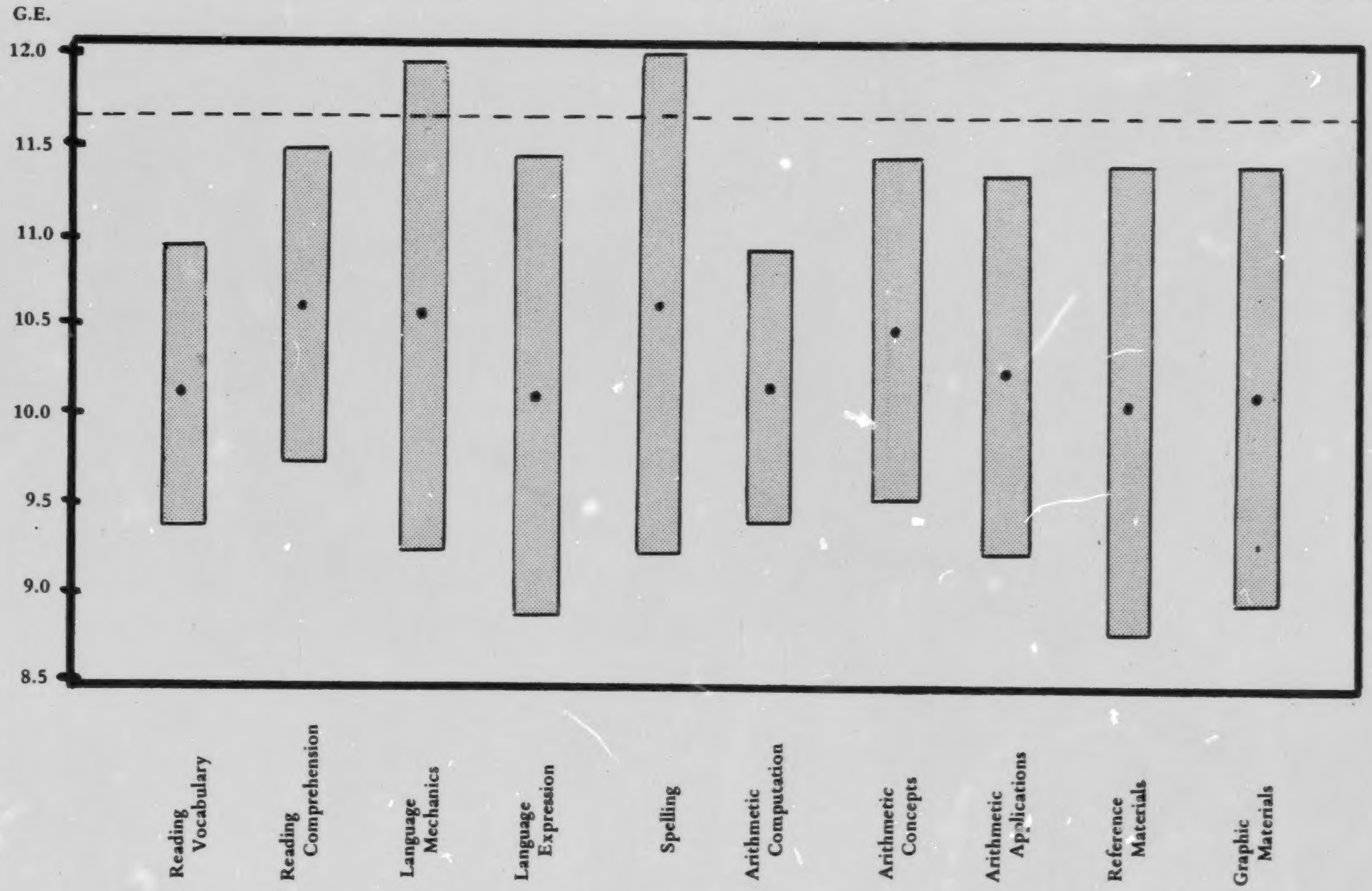


Figure 3

AVERAGE GRADE EQUIVALENT PROFILE AND MEASUREMENT PARAMETERS OF ELEVENTH GRADE PUPILS, STATE-WIDE, FOR THE BASIC SKILL AREAS AS MEASURED BY THE COMPREHENSIVE TESTS OF BASIC SKILLS, FORM Q, LEVEL 4

*Criterion = 11.7

The percentage of Kentucky pupils meeting the criterion of 11.7 for each subtest is reported in Figure 4. If the scores of the sample pupil group were normally distributed and had met or exceeded the expected criterion level, then 50 percent or more of the pupils would be expected to score at or above the expected criterion level.

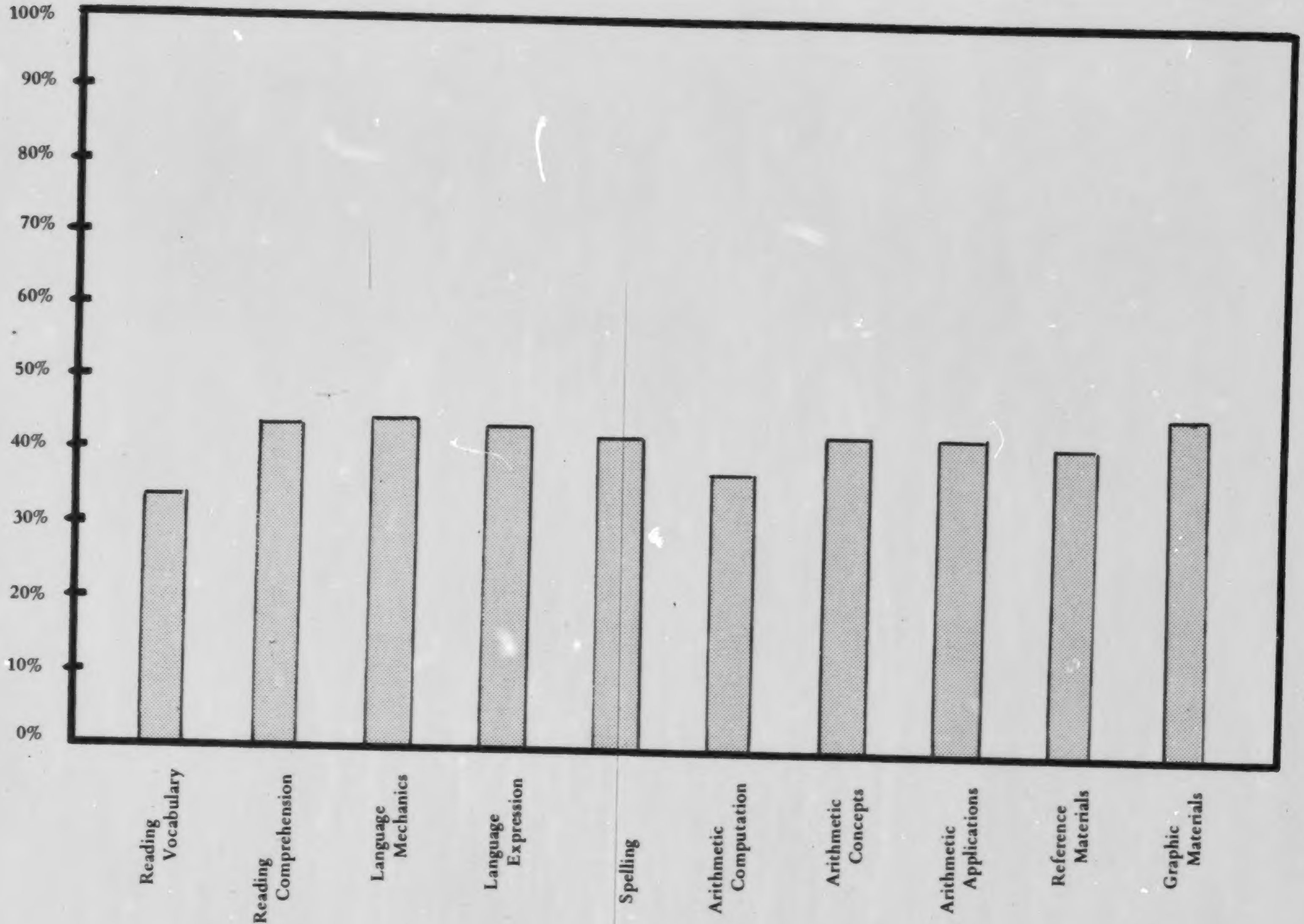


Figure 4

PERCENTAGE PROFILE OF ELEVENTH GRADE PUPILS, STATEWIDE, MEETING THE CRITERION*
IN THE BASIC SKILL AREAS AS MEASURED BY
THE COMPREHENSIVE TESTS OF BASIC SKILLS, FORM Q, LEVEL 4

*Criterion = 11.7

Goal 1.7: Each citizen of the Commonwealth should be assured the opportunity to develop a positive attitude toward the acquisition of knowledge - both formal and informal.

The assessment of Goal 1.7 involved measurement of affective behavior concerning attitudes toward (1) school, (2) reading and (3) arithmetic. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eleventh grade pupils who responded in the desired manner to individual attitudinal questions. A criterion of 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 1.7 are presented below.

Attitude Toward School

Performance Objective 1.7.1

During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward school by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Results

The percentage of eleventh grade pupils meeting the criterion as well as the desired directional response is provided for each related item concerning attitude toward school.

Statement #1. School is fair to students.

Of the pupils in the statewide sample, 67 percent responded positively (agreement with statement).

Statement #2. I often get discouraged in school.

Of the pupils in the statewide sample, 40 percent responded positively (disagreement with statement).

Statement #3. I am thinking about quitting school.

Of the pupils in the statewide sample, 89 percent responded positively (disagreement with statement).

Statement #4. I often feel upset in school.

Of the pupils in the statewide sample, 58 percent responded positively (disagreement with statement).

Statement #5. I believe I am getting a good education in school.

Of the pupils in the statewide sample, 77 percent responded positively (agreement with statement).

Statement #6. Coming to school is worthwhile.

Of the pupils in the statewide sample, 86 percent responded positively (agreement with statement).

Statement #7. My grades in school discourage me.

Of the pupils in the statewide sample, 67 percent responded positively (disagreement with statement).

Statement #8. I can get information at school concerning college and future work.

Of the pupils in the statewide sample, 88 percent responded positively (agreement with statement).

Attitude Toward Reading

Performance Objective 1.7.2

During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward reading by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Results

The percentage of eleventh grade pupils meeting the criterion as well as the desired directional response is provided for each related item concerning attitude toward reading.

Statement #1. I like to read before I go to bed.

Of the pupils in the statewide sample, 49 percent responded positively (agreement with statement).

Statement #2. I am not a very good reader.

Of the pupils in the statewide sample, 73 percent responded positively (disagreement with statement).

Statement #3. Reading is one of my favorite activities.

Of the pupils in the statewide sample, 39 percent responded positively (agreement with statement).

Statement #4. Reading is not very important.

Of the pupils in the statewide sample, 91 percent responded positively (disagreement with statement).

Statement #5. When I have some free time, I like to read a book.

Of the pupils in the statewide sample, 57 percent responded positively (agreement with statement).

Statement #6. I like to read hard books.

Of the pupils in the statewide sample, 31 percent responded positively (agreement with statement).

Statement #7. I like to answer questions about things I have read in school.

Of the pupils in the statewide sample, 49 percent responded positively (agreement with statement).

Statement #8. Most school books are not very interesting.

Of the pupils in the statewide sample, 39 percent responded positively (disagreement with statement).

Attitude Toward Arithmetic

Performance Objective 1.7.3

During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward arithmetic by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Results

The percentage of eleventh grade pupils meeting the criterion as well as the desired directional response is provided for each related item concerning attitude toward arithmetic.

Statement #1. Mathematics is interesting to me.

Of the pupils in the statewide sample, 51 percent responded positively (agreement with statement).

Statement #2. Mathematics is not my favorite subject.

Of the pupils in the statewide sample, 34 percent responded positively (disagreement with statement).

Statement #3. I would like to spend more time in working mathematics problems.

Of the pupils in the statewide sample, 30 percent responded positively (agreement with statement).

Statement #4. Mathematics is not very important.

Of the pupils in the statewide sample, 86 percent responded positively (disagreement with statement).

Statement #5. Working out mathematics problems is interesting.

Of the pupils in the statewide sample, 54 percent responded positively (agreement with statement).

Statement #6. Mathematics really makes me feel good.

Of the pupils in the statewide sample, 25 percent responded positively (agreement with statement).

Statement #7. I don't like to explain mathematics problems.

Of the pupils in the statewide sample, 32 percent responded positively (disagreement with statement).

Statement #8. I would like to spend more time working with mathematics.

Of the pupils in the statewide sample, 34 percent responded positively (agreement with statement).

Conclusions--Attitude Toward School, Reading and Arithmetic

It may be generally concluded that the performance objectives related to eleventh grade pupils' attitudes toward school, reading, and arithmetic were attained. However, these were individual statements for which less than 50 percent of the pupils gave the desired directional response.

These statements were the following:

School

Statement #2: I often get discouraged in school.

Reading

Statement #1: I like to read before I go to bed.

Statement #3: Reading is one of my favorite activities.

Statement #6: I like to read hard books.

Statement #8: Most school books are not very interesting.

Arithmetic

Statement #2: Mathematics is not my favorite subject.

Statement #3: I would like to spend more time working mathematics problems.

Statement #6: Math really makes me feel good.

Statement #7: I don't like to explain math problems.

Statement #8: I would like to spend more time working with math.

GOAL AREA III: HUMAN RELATIONSHIPS

Goal 3.2: Each citizen of the Commonwealth should have an understanding of the worth and dignity of other people.

The assessment of Goal 3.2 involved measurement of affective behavior concerning attitude toward peers. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eleventh grade pupils who responded in the desired manner to the individual attitudinal questions. A criterion or 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 3.2 are presented below.

Performance Objective 3.2.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward peers by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Results

The percentage of eleventh grade pupils meeting the criterion as well as the desired directional response is provided for each related item concerning attitude toward peers.

Statement #1. Making friends at school is easy.

Of the pupils in the statewide sample, 80 percent responded positively (agreement with statement).

Statement #2. I like my classmates.

Of the pupils in the statewide sample, 94 percent responded positively (agreement with statement).

Statement #3. I don't care if I make the same grades as my friends.

Of the pupils in the statewide sample, 40 percent responded positively (disagreement with statement).

Statement #4. Students in my school make other students feel welcome.

Of the pupils in the statewide sample, 62 percent responded positively (agreement with statement).

Statement #5. I look forward to seeing my friends at school.

Of the pupils in the statewide sample, 92 percent responded positively (agreement with statement).

Statement #6. I have lots of friends in school.

Of the pupils in the statewide sample, 87 percent responded positively (agreement with statement).

Statement #7. My friends have difficulty with reading.

Of the pupils in the statewide sample, 84 percent responded positively (disagreement with statement).

Statement #8. I get discouraged with my friends.

Of the pupils in the statewide sample, 63 percent responded positively (disagreement with statement).

Conclusion--Attitude Toward Peers Results

According to the needs assessment results, the performance objective related to eleventh grade pupils' attitudes toward peers was attained on a statewide basis. There was no statement where less than 50 percent of the pupils gave the desired directional response.

A breakdown of the results by Educational Development District is presented in a later section of the present report.

GOAL AREA IV: CITIZENSHIP

Goal 4.3: Each citizen of the Commonwealth should have a knowledge of the interdependence of the individual's rights and responsibilities in a democracy.

The assessment of Goal 4.3 involved measurement of affective behavior concerning attitude toward peers. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eleventh grade pupils who responded in the desired manner to the individual attitudinal questions. A criterion of 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 4.3 are presented below.

Performance Objective 4.3.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward citizenship by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Results

The percentage of eleventh grade pupils meeting the criterion as well as the desired directional response is provided for each related item concerning attitude toward citizenship.

Statement #1. If everyone disobeys a civil law, then it is okay for me to disobey it too.

Of the pupils in the statewide sample, 88 percent responded positively (disagreement with statement).

Statement #2. Democracy and the democratic processes should be practiced within the school.

Of the pupils in the statewide sample, 83 percent responded positively (agreement with statement).

Statement #3. To succeed in politics, one must compromise his principles.

Of the pupils in the statewide sample, 23 percent responded positively (disagreement with statement).

Statement #4. I feel that everyone should register and vote.

Of the pupils in the statewide sample, 84 percent responded positively (agreement with statement).

Statement #5. I believe that every student should be taught to respect the laws of government.

Of the pupils in the statewide sample, 93 percent responded positively (agreement with statement).

Statement #6. It has been said that the simplest form of government has its origin in the home.

Of the pupils in the statewide sample, 87 percent responded positively (agreement with statement).

Statement #7. I believe that for every right and privilege there is a corresponding responsibility.

Of the pupils in the statewide sample, 94 percent responded positively (agreement with statement).

Statement #8. It is important to understand the purpose, structure, and functioning of the United Nations.

Of the pupils in the statewide sample, 83 percent responded positively (agreement with statement).

Conclusion--Attitude Toward Citizenship Results

According to the needs assessment results, the performance objective related to eleventh grade pupils' attitudes toward citizenship was attained on a statewide basis. However, there was one statement where less than 50 percent of the pupils gave the desired directional response.

Statement #3: To succeed in politics, one must compromise his principles.

Appendix E gives the statewide percentages of desired directional responses for eleventh grade pupils by sex.

A breakdown of the results by Educational Development District is presented in a later section of the present report.

GOAL AREA VI: PHYSICAL AND MENTAL WELL BEING

Goal 6.3: Each citizen of the Commonwealth should have a positive and realistic acceptance of self.

The assessment of Goal 6.3 involved measurement of affective behavior concerning attitude toward peers. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eight grade pupils who responded in the desired manner to the individual attitudinal questions. A criterion of 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 6.3 are presented below.

Performance Objective 2.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward self by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Results

The percentage of eleventh grade pupils meeting the criterion as well as the desired directional response is provided for each related item concerning attitude toward self.

Statement #1. I make friends easily.

Of the pupils in the statewide sample, 92 percent responded positively (agreement with statement).

Statement #2. I generally feel comfortable in my classes.

Of the pupils in the statewide sample, 80 percent responded positively (agreement with statement).

Statement #3. I am not very cheerful.

Of the pupils in the statewide sample, 84 percent responded positively (disagreement with statement).

Statement #4. If I have something to say, I generally say it.

Of the pupils in the statewide sample, 70 percent responded positively (agreement with statement).

Statement #5. I am easy to like.

Of the pupils in the statewide sample, 87 percent responded positively (agreement with statement).

Statement #6. My classmates do better in school than I do.

Of the pupils in the statewide sample, 69 percent responded positively (disagreement with statement).

Statement #7. My studying is not satisfactory.

Of the pupils in the statewide sample, 53 percent responded positively (disagreement with statement).

Statement #8. I know my subjects very well.

Of the pupils in the statewide sample, 54 percent responded positively (agreement with statement).

Conclusions--Attitude Toward Self

It may be generally concluded that the performance objectives related to eleventh grade pupils' attitudes toward self were attained. There were no individual statements for which less than 50 percent of the pupils gave the desired directional response.

Statewide Profile Attitudinal Goals

The assessment results for the attitudinal areas are illustrated on the following page as a statewide profile. Figure 5 indicates the average percentage of Kentucky pupils meeting the criterion of 50 percent positive response.

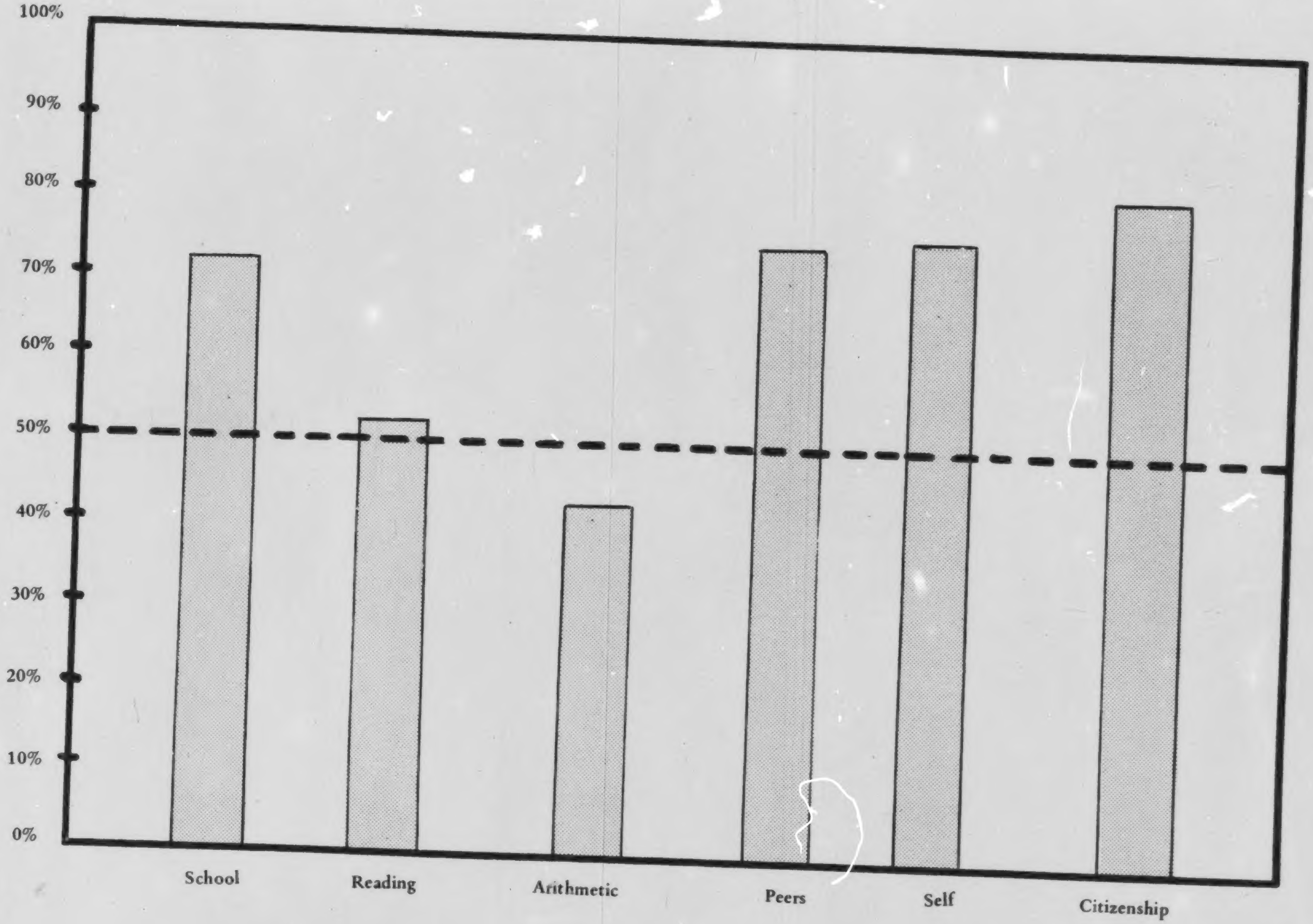


Figure 5

AVERAGE PERCENTAGE PROFILE OF PUPILS, STATEWIDE, MEETING THE CRITERION *
IN ATTITUDINAL AREAS AS MEASURED BY
THE KENTUCKY STUDENT ATTITUDE INVENTORY

*Criterion = 50%

ASSESSMENT RESULTS FOR EDUCATIONAL DEVELOPMENT DISTRICT

Results for Kentucky pupils by Educational Development Districts are provided in the current section. Actual attainment levels in relation to expected attainment levels are presented for general skill areas and specific skills/concepts by goal area. Sample assessment items are provided for reference to each skill/concept area. Data tables indicating results for boys and girls separately are presented in Appendix E.

GOAL AREA I: GENERAL EDUCATION

Goal 1.1: Each citizen of the Commonwealth should be assured an opportunity to realize his full potential in written and oral communication, reading, computation, and mathematical concepts.

The general education goal was assessed in the areas of (1) reading, (2) language, (3) arithmetic, and (4) study skills. The Comprehensive Tests of Basic Skills, Form Q, Level 4, were used. A criterion of 11.7 grade equivalency was established as the desired performance level. Analyses of pupil development for general skill areas and specific skills/concepts for Goal 1.1 are presented below. Item analysis results organized by skill/concept are provided in Appendix F.

Reading

Reading Vocabulary

Performance Objective 1.1.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of vocabulary by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Reading Vocabulary Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Vocabulary

Test Situation: Pupils were asked to choose the word which had about the same meaning as an underlined word.

Item: Give the test.

a. make
b. take
c. require
d. administer

Results

The average grade equivalent scores for knowledge of vocabulary and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 1 for each Educational Development District.

TABLE 1

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR KNOWLEDGE OF VOCABULARY

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Vocabulary Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	280	10.6	37
2	315	10.2	30
3	126	10.3	32
4	448	10.4	37
5	296	9.9	29
6	185	10.1	30
7	469	10.5	34
8	370	12.1*	61
9	250	10.2	31
10	189	10.6	38
11	207	9.7	27
12	402	9.3	22
13	605	9.6	26
14	243	9.7	26
15	352	10.5	35
16	60	10.0	31
Kentucky--Statewide	4,797	10.2	33

*Criterion of 11.7 attained

Conclusion

The assessment results presented in Table 1 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 26 percent to 61 percent.

Item analysis data, listed by reading vocabulary skills/concepts for individual Educational Development Districts, may be reviewed in Appendix F.

Results for boys and for girls for the Reading Vocabulary Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.1.1

> During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of the meaning of words in context by attaining an average level of correct answers equal to or exceeding the criterion (69 percent) as measured by the related items of the Reading Vocabulary Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of the Meaning of Words in Context

Test Situation: Pupils were asked to choose the word which had about the same meaning as an underlined word.

Item: outrageous idea

a. pleasurable
b. ineffective
c. humorous
d. atrocious

Results

The average level of items correct for knowledge of the meaning of words in context for each Educational Development District is provided in Table 2.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established.

The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 2

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' KNOWLEDGE OF THE MEANING OF WORDS IN CONTEXT

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Vocabulary Subtest, Item Numbers 1-40

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	70*
2	251	69*
3	126	68
4	342	71*
5	249	67
6	185	68
7	396	69*
8	384	78*
9	224	67
10	160	70*
11	62	67
12	283	54
13	553	62
14	176	66
15	251	70*
16	60	66
Kentucky--Statewide	3,983	68

*Criterion average of 69 percent attained

Conclusion

Results related to knowledge of the meaning of words in context which are presented in Table 2 indicate the existence of learner needs in nine of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 54 percent to 78 percent. This range can be compared to an average expected criterion of 69 percent correct responses for the related items.

Item analysis data for performance objective 1.1.1.1 are provided in Appendix F.

Reading Comprehension

Performance Objective 1.1.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate reading comprehension by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Reading Comprehension

Test Situation: Pupils were asked to read written material and choose the best answer to questions relating to that material.

Item: (An article about ants) Ant societies are divided into

a. two castes.
b. three castes.
c. four castes.
d. five castes.

Results

The average grade equivalent scores for reading comprehension and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 3 for each Educational Development District.

TABLE 3

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR READING COMPREHENSION

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	277	11.0	53
2	315	10.6	41
3	126	10.8	47
4	449	10.6	44
5	296	10.2	38
6	185	10.4	30
7	469	10.8	43
8	368	12.1*	66
9	248	10.7	43
10	189	10.9	50
11	206	10.3	61
12	402	9.9	35
13	606	10.0	35
14	243	10.1	36
15	352	10.8	45
16	60	10.6	42
Kentucky--Statewide	4,791	10.6	43

*Criterion of 11.7 attained

Conclusion

The assessment results presented in Table 3 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 35 percent to 66 percent.

Item analysis data, listed by reading comprehension skills/concepts for individual Educational Development Districts may be reviewed in Appendix F.

Results for boys and for girls for the Reading Comprehension Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.2.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (paraphrasing) of the meaning of ideas by attaining an average level of correct answers equal to or exceeding the criterion (78 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Itemfor Comprehension (Paraphrasing) of the Meaning of Ideas

Test Situation: Pupils were asked to read written material and choose the best answer to questions requiring the rewording of phrases in the material.

Item: (An article about ants) The majority of the work in an ant society is done by the

a. queen.
b. king.
c. males.
d. females.

Results

The average level of items correct for comprehension (paraphrasing) of the meaning of ideas for each Educational Development District is provided in Table 4.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 4

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION (PARAPHRASING) OF THE MEANING OF IDEAS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest,
Item Numbers 7, 11, 12, 19, 21-23, 30, 31, 33, 37

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	82*
2	251	82*
3	126	80*
4	342	81*
5	249	78*
6	185	81*
7	396	82*
8	384	87*
9	224	81*
10	160	80*
11	62	78*
12	283	63
13	553	77
14	176	80*
15	251	82*
16	60	79*
Kentucky--Statewide	3,983	80*

*Criterion average of 78 percent attained

Conclusion

The assessment results presented in Table 4 indicate the existence of learner needs in two of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 63 percent to 87 percent. This range can be compared to an average expected criterion of 78 percent correct responses for items related to comprehension (paraphrasing) of the meaning of ideas.

Item analysis data for performance objective 1.1.2.1 are provided in Appendix F.

Performance Objective 1.1.2.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of main ideas by attaining an average level of correct answers equal to or exceeding the criterion (74 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Main Ideas

Test Situation: Pupils were asked to read written material and choose the correct answer to questions which required them to find the main idea in the material.

Item: (An article about ants) The main point of this article is to explain

a. the life span of an ant.
b. life in an ant society.
c. how ants protect themselves.
d. life of the queen ant.

Results

The average level of items correct for comprehension of main ideas for each Educational Development District is provided in Table 5.

TABLE 5

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF MAIN IDEAS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest, Item Numbers 8, 9, 14, 15, 28, 34, 40, 45

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	75
2	251	76
3	126	75
4	342	76
5	249	73
6	185	73
7	396	77
8	384	80*
9	224	74
10	160	74
11	62	73
12	283	60
13	553	71
14	176	73
15	251	76
16	60	78*
Kentucky--Statewide	3,983	74

*Criterion average of 78 percent attained.

Conclusion

Results related to comprehension of main ideas which are presented in Table 5 indicate the existence of learner needs in fourteen of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 60 percent to 80 percent. This range can be compared to an average expected criterion of 78 percent correct responses for the related items.

Item analysis data for performance objective 1.1.2.2 are provided in Appendix F.

Performance Objective 1.1.2.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of relationships by attaining an average level of correct answers equal to or exceeding the criterion (72 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Relationships

Test Situation: Pupils were asked to read written material and choose the correct answer to questions concerning relationships in the material.

Item: (An article about ants) According to this article, the most important caste in the society is the

a. queen.
b. king.
c. males.
d. females.

Results

The average level of items correct for comprehension of relationships for each Educational Development District is provided in Table 6.

TABLE 6

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF RELATIONSHIPS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest, Item Numbers 1, 29, 32, 36, 44

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	74*
2	251	76*
3	126	77*
4	342	76*
5	249	74*
6	185	75*
7	396	75*
8	384	81*
9	224	75*
10	160	75*
11	62	76*
12	283	62
13	553	69
14	176	72*
15	251	76*
16	60	76*
Kentucky--Statewide	3,983	74*

*Criterion average of 72 percent attained

Conclusion

Results related to comprehension of relationships which are presented in Table 6 indicate the existence of learner needs in two of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 62 percent to 81 percent. This range can be compared to an average expected criterion of 72 percent correct responses for the related items.

Item analysis data for performance objective 1.1.2.3 are provided in Appendix F.

Performance Objective 1.1.2.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (draw conclusion) of given facts and statements by attaining an average level of correct answers equal to or exceeding the criterion (61 percent) as measured by the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension (Draw Conclusions) of Given Facts and Statements

Test Situation: Pupils were asked to read written material and choose the correct response to questions requiring them to draw conclusions from given facts and statements.

Item: (An article about ants) This ant society must be located in a

a. trunk.
b. twig.
c. root.
d. stem.

Results

The average level of items correct for comprehension (draw conclusions) of given facts and statements for each Educational Development District is provided in Table 7.

TABLE 7

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION (DRAW CONCLUSIONS) OF GIVEN FACTS AND STATEMENTS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest, Item Numbers 10, 13, 24-27

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	69*
2	251	71*
3	126	64*
4	342	68*
5	249	65*
6	185	62*
7	396	67*
8	384	74*
9	224	64*
10	160	69*
11	62	68*
12	283	54
13	553	60
14	176	63*
15	251	69*
16	60	68*
Kentucky--Statewide	3,983	66*

*Criterion average of 61 percent attained

Conclusion

The assessment results presented in Table 7 indicate the existence of learner needs in two of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 54 percent to 74 percent. This range can be compared to an average expected criterion of 61 percent correct responses for items related to comprehension (draw conclusions) of given facts and statements.

Item analysis data for performance objective 1.1.2.4 are provided in Appendix F.

Performance Objective 1.1.2.5

> During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (inference) of contextual clues by attaining an average level of correct answers equal to or exceeding the criterion (63 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension (Inference) of Contextual Clues

Test Situation: Pupils were asked to read written material and choose the correct answer for questions which required making inferences from contextual clues.

Item: (An article about ants) An ant society would not exist for long without

a. queens.
b. kings.
c. males.
d. females.

Results

The average level of items correct for comprehension (inference) of contextual clues for each Educational Development District is provided in Table 8.

TABLE 8

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION (INFERENCE) OF CONTEXTUAL CLUES

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest, Item Numbers 2, 4, 5, 41, 42

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	68*
2	251	67*
3	126	68*
4	342	68*
5	249	66*
6	185	65*
7	396	68*
8	384	73*
9	224	70*
10	160	69*
11	62	69*
12	283	56
13	553	62
14	176	69*
15	251	70*
16	60	66*
Kentucky--Statewide	3,983	67*

*Criterion average of 63 percent attained

Conclusion

Results related to comprehension of contextual clues which are presented in Table 8 indicate the existence of learner needs in two of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 56 percent to 73 percent. This range can be compared to an average expected criterion of 63 percent correct responses for the related items.

Item analysis data for performance objective 1.1.2.5 are provided in Appendix F.

Performance Objective 1.1.2.6

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of indefinite or incomplete statements (extended meaning) by attaining an average level of correct answers equal to or exceeding the criterion (59 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Analysis of Indefinite or Incomplete Statements (Extended Meaning)

Test Situation: Pupils were asked to read written material and choose the correct answer to questions which extended the meaning of statements in the material.

Item: (An article about ants) This article gives the impression that ants perform

a. a variety of skilled chores.
b. very few skilled chores.
c. no chores at all.
d. chores of no value.

Results

The average level of items correct for analysis of indefinite or incomplete statements (extended meaning) for each Educational Development District is provided in Table 9.

TABLE 9

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' ANALYSIS OF INDEFINITE OR INCOMPLETE STATEMENTS (EXTENDED MEANING)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest, Item Numbers 3, 6, 18, 35, 43

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	62*
2	251	61*
3	126	65*
4	342	64*
5	249	61*
6	185	64*
7	396	61*
8	384	67*
9	224	62*
10	160	62*
11	62	62*
12	283	48
13	553	57
14	176	58
15	251	64*
16	60	61*
Kentucky--Statewide	3,983	61*

*Criterion average of 59 percent attained

Conclusion

The assessment results presented in Table 9 indicate the existence of learner needs in three of the sixteen Educational Development District reporting. The average percentage of correct answers by Educational Development District ranged from 57 percent to 67 percent. This range can be compared to an average expected criterion of 59 percent correct responses for items related to analysis of indefinite or incomplete statements (extended meaning).

Item analysis data for performance objective 1.1.2.6 are provided in Appendix F.

Performance Objective 1.1.2.7

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of the tone, mood, and intention of the author by attaining an average level of correct answers equal to or exceeding the criterion (59 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Analysis of the Tone, Mood, and Intention of the Author

Test Situation: Pupils were asked to read written material and choose the correct answer to questions relating to the tone, mood, and intention of the author.

Item: (An article about ants) The author describes the work the ants do in the same terms as the work humans do because it

a. helps the reader to understand the work.
b. makes humans look funny.
c. makes ants look funny.
d. makes the article humorous.

Results

The average level of items correct for analysis of the tone, mood, and intention of the author for each Educational Development District is provided in Table 10.

TABLE 10

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' ANALYSIS OF THE TONE, MOOD, AND INTENTION OF THE AUTHOR

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest, Item Numbers 16, 17, 20, 38, 39

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	60*
2	251	61*
3	126	63*
4	342	62*
5	249	59*
6	185	59*
7	396	60*
8	384	65*
9	224	60*
10	160	64*
11	62	59*
12	283	46
13	553	54
14	176	60*
15	251	60*
16	60	58
Kentucky--Statewide	3,983	59*

*Criterion average of 59 percent attained

Conclusion

Results related to analysis of the tone, mood, and intention of the author which are presented in Table 10 indicate the existence of learner needs in three of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 46 percent to 65 percent. This range can be compared to an average expected criterion of 59 percent correct responses for the related items.

Item analysis data for performance objective 1.1.2.7 are provided in Appendix F.

Language

Spelling

Performance Objective 1.1.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of spelling by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language/Seplling Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Spelling

Test Situation: Pupils were asked to choose from a group of words the word which was spelled incorrectly. If all the words were spelled correctly, "none" was marked.

Item: a. postscript
b. hevily
c. luncheon
d. revised
e. none

Results

The average grade equivalent scores for knowledge of spelling and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 11 for each Educational Development District.

TABLE 11

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR KNOWLEDGE OF SPELLING

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language/Spelling Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	276	10.9	50
2	311	10.2	34
3	126	10.8	43
4	449	10.7	45
5	296	10.7	44
6	181	10.2	38
7	469	10.8	43
8	369	12.0*	68
9	247	10.9	48
10	189	11.0	52
11	207	10.2	35
12	403	9.9	33
13	605	10.0	36
14	243	10.4	39
15	352	10.8	44
16	59	10.1	36
Kentucky--Statewide	4,782	10.6	42

*Criterion of 11.7 attained

Conclusion

The assessment results presented in Table 11 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 33 percent to 68 percent.

Item analysis data, listed by language/spelling skills/concepts for individual Educational Development Districts, may be reviewed in Appendix F.

Results for boys and for girls for the Language/Spelling Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.3.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of correctly or incorrectly spelled words by attaining an average level of correct answers equal to or exceeding the criterion (67 percent) as measured by the related items of the Language/Spelling Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Correctly or Incorrectly Spelled Words

Test Situation: Pupils were asked to choose from a group of words the word which was spelled incorrectly. If all the words were spelled correctly, "none" was marked.

Item:
a. humorous
b. delisious
c. mysterious
d. incongruous
e. none

Results

The average level of items correct for knowledge of correctly or incorrectly spelled words for each Educational Development District is provided in Table 12.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 12

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' KNOWLEDGE OF CORRECTLY AND INCORRECTLY SPELLED WORDS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language/Spelling Subtest, Item Numbers 1-30

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	68*
2	251	66
3	126	69*
4	342	69*
5	249	69*
6	185	65
7	396	69*
8	384	74*
9	224	68*
10	160	70*
11	62	61
12	283	52
13	553	63
14	176	66
15	251	69*
16	60	63
Kentucky--Statewide	3,983	66

*Criterion average of 67 percent attained

Conclusion

The assessment results presented in Table 12 indicate the existence of learner needs in seven of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 52 percent to 74 percent. This range can be compared to an average expected criterion of 67 percent correct responses for items related to knowledge of correctly and incorrectly spelled words.

Item analysis data for performance objective 1.1.3.1 are provided in Appendix F.

Language Mechanics

Performance Objective 1.1.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of the mechanics of language by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of the Mechanics of Language

Test Situation: Pupils were asked to choose the answer which uses the best punctuation for an underlined part in a sentence. "Best as it is" was marked if the underlined part was punctuated correctly.

Item: Tom is going to race, his car.

a. race. his
b. race his
c. race; his
d. best as it is

Test Situation: Pupils were also asked to find the mistakes in capitalization in underlined parts of sentences. "None" was marked if there were no mistakes in capitalization.

Item: Jack was taken to bay Memorial hospital today. None.

Jack was	taken to	bay Memorial	hospital today.	None.
a.	b.	c.	d.	e.

Results

The average grade equivalent scores for application of the mechanics of language and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 13 for each Educational Development District.

TABLE 13

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENT AGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR APPLICATION OF THE MECHANICS OF LANGUAGE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Mechanics Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	275	10.9	46
2	315	10.7	40
3	126	11.2	48
4	450	10.4	41
5	296	10.7	55
6	185	10.4	41
7	469	10.7	42
8	369	12.2*	63
9	248	10.5	39
10	188	11.0	49
11	207	10.4	40
12	403	9.8	33
13	607	10.1	37
14	243	10.2	40
15	351	10.5	43
16	60	10.5	40
Kentucky--Statewide	4,792	10.6	42

*Criterion of 11.7 attained

Conclusion

The assessment results presented in Table 13 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 from 33 percent to 63 percent.

Item analysis data, listed by language mechanics skills/concepts for individual Educational Development Districts, amy be reviewed in Appendix F.

Results for boys and for girls for the Language Mechanics Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.4.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of punctuation skills by attaining an average level of correct answers equal to or exceeding the criterion (71 percent) as measured by the related items of the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Punctuation Skills

Test Situation: Pupils were asked to choose the answer which uses the best punctuation for an underlined part in a sentence. "Best as it is" was chosen if the underlined part was punctuated correctly.

Item: Do you like to go to movies!

a. movies
b. movies?
c. movies,
d. best as it is

Results

The average level of items correct for application of punctuation skills for each Educational Development District is provided in Table 14.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 14

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF PUNCTUATION SKILLS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Mechanics Subtest, Item Numbers 1-13

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	72*
2	251	75*
3	126	74*
4	342	72*
5	249	71*
6	185	71*
7	396	73*
8	384	77*
9	224	70
10	160	71*
11	62	69
12	283	57
13	553	70
14	176	68
15	251	73*
16	60	71*
Kentucky--Statewide	3,983	71*

*Criterion average of 71 percent attained

Conclusion

The assessment results presented in Table 14 indicate the existence of learner needs in five of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 57 percent to 77 percent. This range can be compared to an average expected criterion of 71 percent correct responses for items related to application of punctuation skills.

Item analysis data for performance objective 1.1.4.1 are provided in Appendix F.

Performance Objective 1.1.4.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of capitalization skills by attaining an average level of correct answers equal to or exceeding the criterion (62 percent) as measured by the related items of the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Capitalization Skills

Test Situation: Pupils were asked to find the mistakes in capitalization in underlined parts of sentences. "None" was marked if there were no mistakes in capitalization.

Item:	The best	Restaurant in	town is	called Arthur's.	None.
	a.	b.	c.	d.	e.

Results

The average level of items correct for application of capitalization skills for each Educational Development District is provided in Table 15.

TABLE 15

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF CAPITALIZATION SKILLS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Mechanics Subtest, Item Numbers 14-25

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	68*
2	251	69*
3	126	73*
4	342	67*
5	249	71*
6	185	68*
7	396	67*
8	384	74*
9	224	67*
10	160	72*
11	62	68*
12	283	53
13	553	64*
14	176	67*
15	251	67*
16	60	65*
Kentucky -- Statewide	3,983	67*

*Criterion average of 62 percent attained

Conclusion

Results related to application of capitalization skills which are presented in Table 15 indicate the existence of learner needs in one of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 53 percent to 74 percent. This range can be compared to an average expected criterion of 62 percent correct responses for the related items.

Item analysis data for performance objective 1.1.4.2 are provided in Appendix F.

Language Expression

Performance Objective 1.1.5

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of language expression by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Language Expression

Test Situation: Pupils were asked to choose the word or words to fill a blank in a sentence which best expressed the idea presented.

Item: The happy girls _____ as they walked down the street.

a. wailed
b. laughed
c. cried
d. stalked

Results

The average grade equivalent scores for application of language expression and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 16 for each Educational Development District.

TABLE 16

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR APPLICATION OF LANGUAGE EXPRESSION

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Expression Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	275	10.7	47
2	313	10.2	38
3	126	10.5	45
4	450	10.2	42
5	296	10.2	41
6	185	10.1	38
7	469	10.5	42
8	367	12.1*	69
9	247	10.3	45
10	188	11.0	51
11	207	9.8	37
12	403	9.1	30
13	607	9.3	30
14	243	9.5	35
15	350	10.6	46
16	60	9.7	35
Kentucky--Statewide	4,786	10.2	42

*Criterion of 11.7 attained

Conclusion

The assessment results presented in Table 16 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 30 percent to 69 percent.

Item analysis data, listed by language expression skills/concepts for individual Educational Development Districts, may be reviewed in Appendix F.

Results for boys and for girls for the Language Expression Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.5.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of correct grammatical usage by attaining an average level of correct answers equal to or exceeding the criterion (74 percent) as measured by the related items of the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Correct Grammatical Usage

Test Situation: Pupils were asked to choose the correct grammatical form of words to fill in the blanks in sentences.

Item: The poem that the poet _____ was beautiful.

a. had written
b. have written
c. will write
d. shall write

Results

The average level of items correct for application of correct grammatical usage for each Educational Development District is provided in Table 17.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 17

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF CORRECT GRAMMATICAL USAGE

Comprehensive Tests of Basic Skills, Form W, Level 4
Language Expression Subtest, Item Numbers 26-35

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	73
2	251	73
3	126	74*
4	342	75*
5	249	73
6	185	73
7	396	76*
8	384	79*
9	224	73
10	160	75*
11	62	78*
12	283	59
13	553	69
14	176	70
15	251	77*
16	60	70
Kentucky--Statewide	3,983	73

*Criterion average of 74 percent attained

Conclusion

The assessment results presented in Table 17 indicate the existence of learner needs in nine of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 59 percent to 79 percent. This range can be compared to an average expected criterion of 74 percent correct responses for items related to application of correct grammatical usage.

Item analysis data for performance objective 1.1.5.1 are provided in Appendix F.

Performance Objective 1.1.5.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of clarity and/or economy of expression by attaining an average level of correct answers equal to or exceeding the criterion (59 percent) as measured by the related items of the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Clarity and/or Economy of Expression

Test Situation: Pupils were asked to choose the phrase which expressed an underlined idea in the clearest and simplest way. "Best as it is" was selected if the idea was stated best in the sentence.

Item: The dog looked and looked everywhere for his bone.

a. searched
b. saw
c. watched
d. best as it is

Results

The average level of items correct for comprehension of clarity and/or economy of expression for each Educational Development District is provided in Table 18.

TABLE 18

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF CLARITY AND/OR ECONOMY OF EXPRESSION

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Expression Subtest, Item Numbers 46-55

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	59*
2	251	60*
3	126	60*
4	342	62*
5	249	62*
6	185	59*
7	396	59*
8	384	68*
9	224	59*
10	160	61*
11	62	60*
12	283	46
13	553	55
14	176	55
15	251	61*
16	60	57*
Kentucky--Statewide	3,983	59*

*Criterion average of 59 percent attained

Conclusion

Results related to comprehension of clarity and/or economy of expression which are presented in Table 18 indicate the existence of learner needs in four of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 46 percent to 68 percent. This range can be compared to an average expected criterion of 59 percent correct responses for the related items.

Item analysis data for performance objective 1.1.5.2 are provided in Appendix F.

Performance Objective 1.1.5.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of the author's intention (word choice) by attaining an average level of correct answers equal to or exceeding the criterion (71 percent) as measured by the related items of the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of the Author's Intention (Word Choice)

Test Situation: Pupils were asked to choose the word or words to fill in blanks in sentences which best expressed the intentions of the author.

Item: The beautiful day made the woman want to _____ as she worked.

a. sing
b. cry
c. run
d. frown

Results

The average level of items correct for comprehension of the author's intention (word choice) for each Educational Development District is provided in Table 19.

TABLE 19

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF THE AUTHOR'S INTENTION (WORD CHOICE)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Expression Subtest, Item Numbers 36-45

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	73*
2	251	72*
3	126	73*
4	342	72*
5	249	71*
6	185	70
7	396	71*
8	384	78*
9	224	69
10	160	76*
11	62	70
12	283	53
13	553	63
14	176	67
15	251	72*
16	60	67
Kentucky--Statewide	3,983	70

*Criterion average of 71 percent attained

Conclusion

Results related to comprehension of the author's intention which are presented in Table 19 indicate the existence of learner needs in seven of the reported sixteen Educational Development Districts. The average percentage of correct responses by Educational Development District ranged from 53 percent to 78 percent. This range can be compared to an average expected criterion of 71 percent correct responses for the related items.

Item analysis data for performance objective 1.1.5.3 are provided in Appendix F.

Arithmetic

Arithmetic Computation

Performance Objective 1.1.6

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of arithmetic computation by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Arithmetic Computation

Test Situation: Pupils were asked to choose correct solutions to problems of addition, subtraction, multiplication, and division.

Item: $40 \overline{)\,160}$

a. 14
b. 2
c. 4
d. 5

Results

The average grade equivalent scores for application of arithmetic computation and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 20 for each Educational Development District.

TABLE 20

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR APPLICATION OF ARITHMETIC COMPUTATION

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	278	10.7	41
2	312	10.1	32
3	126	10.2	29
4	447	10.1	35
5	296	9.9	29
6	182	9.9	28
7	467	10.4	37
8	363	11.7*	56
9	251	10.2	29
10	189	10.0	33
11	208	9.7	24
12	402	9.4	25
13	538	9.6	26
14	242	9.8	26
15	354	10.3	36
16	59	9.0	20
Kentucky--Statewide	4,714	10.1	33

*Criterion of 11.7 percent attained

Conclusion

The assessment results presented in Table 20 indicate the existence of learner needs in fifteen of sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 20 percent to 56 percent.

Item analysis data, listed by arithmetic computations skills/concepts for individual Educational Development Districts, may be reviewed in Appendix F.

Results for boys and for girls for the Arithmetic Computation Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.6.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of addition skills by attaining an average level of correct answers equal to or exceeding the criterion (76 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Addition Skills

Test Situation: Pupils were asked to choose the correct solution for problems of addition.

Item:	35.7	a. 1371
	62.5	b. 1.371
	38.9	c. 13.71
		d. 137.1

Results

The average level of items correct for application of addition skills for each Educational Development District is provided in Table 21.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 21

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF ADDITION SKILLS

Comprehensive Test of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest, Item Numbers 1-4, 17-20, 33-36

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	74
2	251	71
3	126	73
4	342	74
5	249	72
6	185	72
7	396	76*
8	384	80*
9	224	72
10	160	70
11	62	68
12	283	58
13	553	62
14	176	69
15	251	74
16	60	66
Kentucky--Statewide	3,983	61

*Criterion of 76 percent attained

Conclusion

The assessment results presented in Table 21 indicate the existence of learner needs in fourteen of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 58 percent to 80 percent. This range can be compared to an average expected criterion of 76 percent correct responses for items related to application of addition skills.

Item analysis data for performance objective 1.1.6.1 are provided in Appendix F.

Performance Objective 1.1.6.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of subtraction skills by attaining an average level of correct answers equal to or exceeding the criterion (72 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Subtraction Skills

Test Situation: Pupils were asked to choose the correct solution to problems of subtraction.

Item: $\begin{array}{r} 600.00 \\ \underline{-19.26} \end{array}$

a. 591.84
b. 580.74
c. 680.74
d. 581.75

Results

The average level of items correct for application of subtraction skills for each Educational Development District is provided in Table 22.

TABLE 22

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF SUBTRACTION SKILLS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest, Item Numbers 5-8, 21-24, 37-40

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	74*
2	251	69
3	126	71
4	342	71
5	249	68
6	185	69
7	396	73*
8	384	78*
9	224	69
10	160	68
11	62	65
12	283	55
13	553	60
14	176	65
15	251	73*
16	60	60
Kentucky--Statewide	3,983	68

*Criterion average of 72 percent attained

Conclusion

Results related to application of subtraction skills which are presented in Table 22 indicate the existence of learner needs in twelve of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 55 percent to 78 percent. This range can be compared to an average expected criterion of 72 percent correct responses for the related items.

Item analysis data for performance objective 1.1.6.2 are provided in Appendix F.

Performance Objective 1.1.6.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of multiplication skills by attaining an average level of correct answers equal to or exceeding the criterion (79 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q Level 4.

Sample Assessment Item for Application of Multiplication Skills

Test Situation: Pupils were asked to choose the correct solution to problems of multiplication.

Item: $\begin{array}{r} 524.2 \\ \underline{\times \quad 5} \end{array}$

a. 26210
b. 262.10
c. 26.210
d. 2621.0

Results

The average level of items correct for application of multiplication skills for each Educational Development District is provided in Table 23.

TABLE 23

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF MULTIPLICATION SKILLS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest, Item Numbers 9-12, 25-28, 41-44

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	79*
2	251	77
3	126	77
4	342	76
5	249	75
6	185	77
7	396	78
8	384	82*
9	224	77
10	160	73
11	62	70
12	283	59
13	553	66
14	176	73
15	251	78
16	60	69
Kentucky--Statewide	3,983	74

*Criterion average of 79 percent attained

Conclusion

Results related to application of multiplication skills which are presented in Table 23 indicate the existence of learner needs in fourteen of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 59 percent to 82 percent. This range can be compared to an average expected criterion of 79 percent correct responses for the related items.

Item analysis data for performance objective 1.1.6.3 are provided in Appendix F.

Performance Objective 1.1.6.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of division skills by attaining an average level of correct answers equal to or exceeding the criterion (72 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Division Skills

Test Situation: Pupils were asked to choose the correct solution to problems of division.

Item: $73\overline{)\,8654}$

a. 119
b. 116 41/73
c. 118 40/73
d. 116 40/73

Results

The average level of items correct for application of division skills for each Educational Development District is provided in Table 24.

TABLE 24

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' APPLICATION OF DIVISION SKILLS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest, Item Numbers 13-16, 29-32, 45-48

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	73*
2	251	70
3	126	71
4	342	70
5	249	66
6	185	66
7	396	72*
8	384	76*
9	224	70
10	160	66
11	62	62
12	283	55
13	553	60
14	176	66
15	251	70
16	60	56
Kentucky--Statewide	3,983	67

*Criterion average of 72 percent attained

Conclusion

Results related to application of division skills which are presented in Table 24 indicate the existence of learner needs in thirteen of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 55 percent to 76 percent. This range can be compared to an average expected criterion of 72 percent correct responses for the related items.

Item analysis data for performance objective 1.1.6.4 are provided in Appendix F.

Arithmetic Concepts

Performance Objective 1.1.7

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of arithmetic concepts by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Arithmetic Concepts

Test Situation: Pupils were asked to choose the correct answer to questions relating to various arithmetic concepts.

Item: The $\sqrt{16}$ is equal to which of the following?

a. 8
b. 4
c. 64
d. 32

Results

The average grade equivalent scores for comprehension of arithmetic concepts and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 25 for each Educational Development District.

TABLE 25

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR COMPREHENSION OF ARITHMETIC CONCEPTS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	276	11.2	48
2	312	10.4	37
3	126	10.7	39
4	447	10.5	39
5	295	10.3	33
6	182	10.4	35
7	464	10.8	41
8	366	12.3*	71
9	250	10.5	36
10	188	10.5	37
11	208	10.1	28
12	401	9.7	27
13	608	9.8	28
14	242	10.0	25
15	354	10.6	38
16	60	9.6	26
Kentucky--Statewide	4,779	10.5	37

*Criterion score of 11.7 percent attained

Conclusion

The assessment results presented in Table 25 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 26 percent to 71 percent.

Item analysis data, listed by arithmetic concept skills/concept for individual Educational Development Districts, may be reviewed in Appendix F.

Results for boys and for girls for the Arithmetic Concepts Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.7.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of arithmetic concepts by attaining an average level of correct answers equal to or exceeding the criterion (60 percent) as measured by the related items of the Arithmetic Concept Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Arithmetic Concepts

Test Situation: Pupils were asked to choose the correct answer to questions related to specific arithmetic concepts.

Item: Which of the following decimal fractions lies on the number line between .5 and .6?

a. .05
b. .55
c. .06
d. .62

Results

The average level of items correct for knowledge of arithmetic concepts for each Educational Development District is provided in Table 26.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 26

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' KNOWLEDGE OF ARITHMETIC CONCEPTS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest, Item Numbers 4, 8, 13, 22, 25, 27, 29

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	65*
2	251	62*
3	126	65*
4	342	65*
5	249	59
6	185	59
7	396	63*
8	384	73*
9	224	61*
10	160	61*
11	62	58
12	283	48
13	353	56
14	176	60*
15	251	64*
16	60	54
Kentucky--Statewide	3,983	61*

*Criterion average of 60 percent attained

Conclusion

The assessment results presented in Table 26 indicate the existence of learner needs in six of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 48 percent to 73 percent. This range can be compared to an average expected criterion of 60 percent correct responses for items related to knowledge of arithmetic concepts.

Item analysis data for performance objective 1.1.7.1 are provided in Appendix F.

Performance Objective 1.1.7.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of arithmetic concepts (converting form) by attaining an average level of correct answers equal to or exceeding the criterion (70 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Arithmetic Concepts (Converting Form)

Test Situation: Pupils were asked to choose the correct answers to questions related to converting the form of numbers given.

Item: How many feet are there in 16 1/2 yards?

a. 240 feet
b. 49 1/2 feet
c. 6 feet
d. 49 1/4 feet

Results

The average level of items correct for comprehension of arithmetic concepts for each Educational Development District is provided in Table 27.

TABLE 27

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF ARITHMETIC CONCEPTS (CONVERTING FORM)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest, Item Numbers 7, 10, 11, 19, 30

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	70*
2	251	68
3	126	72*
4	342	71*
5	249	68
6	185	67
7	396	71*
8	384	77*
9	224	69
10	160	64
11	62	68
12	283	55
13	553	64
14	176	63
15	251	68
16	60	66
Kentucky--Statewide	3,983	68

*Criterion average of 70 percent attained

Conclusion

Results related to comprehension of arithmetic concepts (converting form) presented in Table 27 indicate the existence of learner needs in eleven of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 54 percent to 77 percent. This range can be compared to an average expected criterion of 70 percent correct responses for the related items.

Item analysis data for performance objective 1.1.7.2 are provided in Appendix F.

Performance Objective 1.1.7.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of equations by attaining an average level of correct answers equal to or exceeding the criterion (65 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Equations

Test Situation: Pupils were asked to choose the correct solution to arithmetic equations.

Item: $30 + 10x = 35$. Solve for x.

a. $x = 1/4$
b. $x = 1/2$
c. $x = 2$
d. $x = 5$

Results

The average level of items correct for comprehension of equations for each Educational Development District is provided in Table 28.

TABLE 28

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF EQUATIONS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest, Item Numbers 6, 9, 14, 20, 24

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	68*
2	251	62
3	126	64
4	342	67*
5	249	64
6	185	64
7	396	65*
8	384	78*
9	224	65*
10	160	63
11	62	59
12	283	48
13	553	59
14	176	59
15	251	68*
16	60	57
Kentucky--Statewide	3,983	63

*Criterion average of 65 percent attained

Conclusion

The assessment results presented in Table 28 indicate the existence of learner needs in ten of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 48 percent to 78 percent. This range can be compared to an average expected criterion of 65 percent correct responses for items related to comprehension of equations.

Item analysis data for performance objective 1.1.7.3 are provided in Appendix F.

Performance Objective 1.1.7.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of comparative relationships by attaining an average level of correct answers equal to or exceeding the criterion (82 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Comparative Relationships

Test Situation: Pupils were asked to choose the correct solution to arithmetic problems dealing with comparative relationships.

Item: Of the following, which has the least value?

a. 1/18
b. 1/25
c. 72%
d. 48%

Results

The average level of items correct for comprehension of comparative relationships for each Educational Development District is provided in Table 29.

TABLE 29

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF COMPARATIVE RELATIONSHIPS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest, Item Numbers 1-3, 12, 11

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	83*
2	251	82*
3	126	83*
4	342	82*
5	249	81
6	185	81
7	396	83*
8	384	83*
9	224	81
10	160	80
11	62	78
12	283	67
13	553	79
14	176	83*
15	251	83*
16	60	79
Kentucky--Statewide	3,983	81

*Criterion average 82 percent attained

Conclusion

Results related to comprehension of comparative relationships which are presented in Table 29 indicate the existence of learner needs in eight of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 67 percent to 83 percent. This range can be compared to an average expected criterion of 82 percent correct responses for the related items.

Item analysis data for performance objective 1.1.7.4 are provided in Appendix F.

Performance Objective 1.1.7.5

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of the components of arithmetic problems (organization) by attaining an average level of correct answers equal to or exceeding the criterion (66 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Analysis of the Components of Arithmetic Problems (Organization)

Test Situation: Pupils were asked to choose the correct answer to arithmetic problems relating to organization.

Item: How many quart bottles would you need if you had 27 pints of liquid?

a. 12
b. 14
c. 13
d. 11

Results

The average level of items correct for analysis of the components of arithmetic problems (organization) for each Educational Development District is provided in Table 30.

TABLE 30

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' ANALYSIS OF THE COMPONENTS OF ARITHMETIC PROBLEMS (ORGANIZATION)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest, Item Numbers 5, 15, 17, 18, 21, 23, 26, 28

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	68*
2	251	66*
3	126	65
4	342	70*
5	249	65
6	185	65
7	396	67*
8	384	76*
9	224	64
10	160	63
11	62	62
12	283	52
13	553	58
14	176	64
15	251	67*
16	60	59
Kentucky--Statewide	3,983	64

*Criterion average of 66 percent attained

Conclusion

The assessment results presented in Table 30 indicate the existence of learner needs in ten of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 52 percent to 76 percent. This range can be compared to an average expected criterion of 66 percent correct responses for items related to analysis of the components of arithmetic problems (organization).

Item analysis data for performance objective 1.1.7.5 are provided in Appendix F.

Arithmetic Application

Performance Objective 1.1.8

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of skills in solving arithmetic word problems by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Application of Skills in Solving Arithmetic Word Problems

Test Situation: Pupils were asked to solve arithmetic word problems and choose the correct solution to these problems.

Item: Dick's room has an area of 10 square feet. How many square inches is the area of his room?

a. 154
b. 120
c. 1440
d. 1200

Results

The average grade equivalent scores for application of skills in solving arithmetic word problems and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 31 for each Educational Development District.

TABLE 31

AVERAGE GRADE EQUIVALANT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR APPLICATION OF SKILLS IN SOLVING ARITHMETIC WORD PROBLEMS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Application Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	274	10.7	43
2	312	10.2	34
3	126	10.3	31
4	447	10.4	39
5	295	10.1	33
6	182	10.2	36
7	463	10.6	39
8	364	11.8*	62
9	251	10.2	37
10	188	10.1	32
11	208	9.8	31
12	401	9.8	27
13	607	9.8	29
14	242	10.4	37
15	354	10.2	34
16	60	9.7	28
Kentucky--Statewide	4,774	10.3	36

*Criterion average of 11.7 percent attained

Conclusion

The assessment results presented in Table 31 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 27 percent to 62 percent.

Item analysis data, listed by arithmetic application skills/concepts for individual Educational Development Districts, may be reviewed in Appendix F.

Results for boys and for girls for the Arithmetic Application Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.8.1

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of relationships (ratio, time, part-whole, sequence, geometric) by attaining an average level of correct answers equal to or exceeding the criterion (78 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Relationships (Ratio, Time, Part-Whole, Sequence, Geometric)

Test Situation: Pupils were asked to choose the correct answer to arithmetic word problems relating to ratio, time, part-whole, sequence, and geometry.

Item: Tom has 15 airplanes and 5 cars. The ratio of Tom's airplanes to cars is

a. 5 to 1
b. 5 to 2
c. 3 to 1

Results

The average level of items correct for comprehension of relationships (ratio, time, part-whole, sequence, geometric) for each Educational Development District is provided in Table 32.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 32

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF RELATIONSHIPS (RATIO, TIME, PART-WHOLE, SEQUENCE, GEOMETRIC)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Application Subtest, Item Numbers 31, 32, 37, 38

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	77
2	251	75
3	126	78*
4	342	78*
5	249	74
6	185	75
7	396	80*
8	384	84*
9	224	74
10	160	74
11	62	76
12	283	63
13	553	72
14	176	79*
15	251	77
16	60	71
Kentucky--Statewide	3,983	75

*Criterion average of 78 percent attained

Conclusion

Results related to comprehension of relationships which are presented in Table 32 indicate the existence of learner needs in eleven of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 63 percent to 84 percent. This range can be compared to an average expected criterion of 78 percent correct responses for the related items.

Item analysis data for performance objective 1.1.8.1 are provided in Appendix F.

Performance Objective 1.1.8.2

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of problem-solving (selecting methods) by attaining an average level of correct answers equal to or exceeding the criterion (71 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Problem-Solving (Selecting Methods)

Test Situation: Pupils were asked to choose the correct method for solving arithmetic word problems.

Item: A car traveled 210 miles in 4 hourse. To find out how many miles the car would travel in 8 hours, you would

a. multiply 210 by 4.
b. multiply 210 by 8.
c. divide 210 by 2.
d. multiply 210 by 2.

Results

The average level of items correct for comprehension of problem-solving (selecting methods) for each Educational Development District is provided in Table 33.

TABLE 33

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF PROBLEM-SOLVING (SELECTING METHODS)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Application Subtest, Item Numbers 33, 40-42, 44

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	67
2	251	70
3	126	68
4	342	71*
5	249	70
6	185	70
7	396	69
8	384	78*
9	224	68
10	160	68
11	62	64
12	283	55
13	553	64
14	176	70
15	251	68
16	60	67
Kentucky--Statewide	3,983	68

*Criterion average of 71 percent attained

Conclusion

The assessment results presented in Table 33 indicate the existence of learner needs in fourteen of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 55 percent to 78 percent. This range can be compared to an average expected criterion of 71 percent correct responses for items related to comprehension of problem-solving (selecting methods).

Item analysis data for performance objective 1.1.8.2 are provided in Appendix F.

Performance Objective 1.1.8.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of problem-solving (correct solution) by attaining an average level of correct answers equal to or exceeding the criterion (61 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Problem-Solving (Correct Solution)

Test Situation: Pupils were asked to choose the correct solution to arithmetic word problems.

Item: Sam had to borrow $200.00 for 1/4 of a year. The interest rate was 12% per year. How much interest did Sam have to pay?

a. $6.00
b. $5.00
c. $8.00
d. $2.40

Results

The average level of items correct for comprehension of problem-solving (correct solution) for each Educational Development District is provided in Table 34.

TABLE 34

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF PROBLEM-SOLVING (CORRECT SOLUTION)

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Application Subtest, Item Numbers 36, 43, 46, 47, 50

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	65*
2	251	62*
3	126	63*
4	342	67*
5	249	60
6	185	60
7	396	65*
8	384	71*
9	224	65*
10	160	58
11	62	58
12	283	54
13	553	58
14	176	62*
15	251	62*
16	60	54
Kentucky--Statewide	3,983	62

*Criterion average of 61 percent attained

Conclusion

Results related to comprehension of problem-solving (correct solution) which are presented in Table 34 indicate the existence of learner needs in seven of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 54 percent to 71 percent. This range can be compared to an average expected criterion of 61 percent correct responses for the related items.

Item analysis data for performance objective 1.1.8.3 are provided in Appendix F.

Performance Objective 1.1.8.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of the components of arithmetic word problems by attaining an average level of correct answers equal to or exceeding the criterion (65 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Analysis of the Components of Arithmetic Word Problems

Test Situation: Pupils were asked to choose the correct answer to questions related to the components of arithmetic word problems.

Item: In order to find the average score of 5 boys on a spelling test, you need to know

a. how many words they had to spell.
b. what each boy scored.
c. how long the test lasted.
d. what each boy's average score was.

Results

The average level of items correct for analysis of the components of arithmetic word problems for each Educational Development District is provided in Table 35.

TABLE 35

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' ANALYSIS OF THE COMPONENTS OF ARITHMETIC WORD PROBLEMS

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Application Subtest, Item Numbers 34, 35, 39, 45, 48, 49

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	67*
2	251	65*
3	126	65*
4	342	66*
5	249	63
6	185	62
7	396	69*
8	384	74*
9	224	65*
10	160	62
11	62	65*
12	283	54
13	553	60
14	176	66*
15	251	65*
16	60	59
Kentucky--Statewide	3,983	64

*Criterion average of 65 percent attained

Conclusion

The assessment results presented in Table 35 indicate the existence of learner needs in six of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 54 percent to 74 percent. This range can be compared to an average expected criterion of 65 percent correct responses for items related to analysis of the component of arithmetic word problems.

Item analysis data for performance objective 1.1.8.4 are provided in Appendix F.

Study Skills

Reference Materials

Performance Objective 1.1.9

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of reference material techniques by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Study Skills/Reference Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Reference Material Techniques

Test Situation: Pupils were asked to read various reference materials and choose the correct answer to questions relating to these materials.

Item: (A dictionary entry) How many of the definitions given for the word "express" are verbs?

a. two
b. four
c. six
d. eight

Results

The average grade equivalent scores for knowledge of reference material techniques and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 36 for each Educational Development District.

TABLE 36

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR KNOWLEDGE OF REFERENCE MATERIAL TECHNIQUES

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Reference Materials Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	272	10.9	43
2	312	10.1	33
3	126	10.3	34
4	448	10.3	38
5	295	10.1	34
6	116	10.0	33
7	463	10.2	34
8	369	11.7*	52
9	250	10.2	34
10	188	10.8	43
11	208	10.0	33
12	372	9.2	24
13	608	9.4	26
14	213	10.3	34
15	353	10.5	40
16	60	9.9	30
Kentucky--Statewide	4,653	10.2	35

*Criterion average of 11.7 percent attained

Conclusion

The assessment results presented in Table 36 indicate the existence of learner needs in fifteen of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 24 percent to 52 percent.

Item analysis data, listed by study skills/reference materials skills/ concepts for individual Educational Development Districts may be reviewed in Appendix F.

Results for boys and for girls for the Reference Materials Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.9.1

> During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of dictionary use by attaining an average level of correct answers equal to or exceeding the criterion (77 percent) as measured by the related items of the Study Skills/Reference Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Dictionary Use

Test Situation: Pupils were asked to choose the correct answer to questions relating to the use of a dictionary.

Item: (An entry from the dictionary) How many meanings are given for the word "express"?

a. two
b. four
c. six
d. eight

Results

The average level of items correct for knowledge of dictionary use for each Educational Development District is provided in Table 37.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 37

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' KNOWLEDGE OF DICTIONARY USE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Reference Materials Subtest, Item Numbers 16-20

Educational Development District	Number of pupils	Average Percentage of correct answers
1	281	78*
2	251	78*
3	126	81*
4	342	80*
5	249	79*
6	185	60
7	396	78*
8	384	85*
9	224	78*
10	160	80*
11	62	80*
12	283	60
13	553	71
14	176	64
15	251	81*
16	60	72
Kentucky--Statewide	3,983	75

*Criterion average of 77 percent attained

Conclusion

The Assessment results presented in Table 37 indicate the existence of learner needs in five of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 60 percent to 85 percent. This range can be compared to an average expected criterion of 77 percent correct responses for items related to knowledge of dictionary use.

Item analysis data for performance objective 1.1.9.1 are provided in Appendix F.

Performance Objective 1.1.9.2

> During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of library use by attaining an average level of correct answers equal to or exceeding the criterion (69 percent) as measured by the related items of the Study Skills/Reference Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Knowledge of Library Use

Test Situation: Pupils were asked to choose the correct answer to questions relating to the use of a library.

Item: In which reference book would you look to find the winner of the Super Bowl in 1970?

a. Who's Who in America
b. Roget's Thesaurus
c. World Atlas
d. World Almanac

Results

The average level of items correct for knowledge of library use for each Educational Development District is provided in Table 38.

TABLE 38

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' KNOWLEDGE OF LIBRARY USE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Reference Materials Subtest, Item Numbers 1-15

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	69*
2	251	69*
3	126	68
4	342	70*
5	249	68
6	185	52
7	396	69*
8	384	73*
9	224	68
10	160	70*
11	62	69*
12	283	53
13	553	63
14	176	54
15	251	70*
16	60	68
Kentucky--Statewide	3,983	66

*Criterion average of 69 percent attained

Conclusion

Results related to knowledge of library use which are presented in Table 38 indicate the existence of learner needs in ten of sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 53 percent to 73 percent. This range can be compared to an average expected criterion of 69 percent correct responses for the related items.

Item analysis data for performance objective 1.1.9.2 are provided in Appendix F.

Graphic Materials

Performance Objective 1.1.10

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of graphic materials by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Graphic Materials

Test Situation: Pupils were asked to look at and to use various graphic materials and choose correct answers to questions relating to the material.

Item: (A graph presenting the average income levels by areas in Kentucky) Which area had the greatest income level from 1960-1965?

a. Area I
b. Area II
c. Area III
d. Area IV

Results

The average grade equivalent scores for comprehension of graphic materials and the percentage of pupils meeting the criterion score of 11.7 are presented in Table 39 for each Educational Development District.

TABLE 39

AVERAGE GRADE EQUIVALENT SCORES AND THE PERCENTAGE OF ELEVENTH GRADE PUPILS MEETING THE CRITERION BY EDUCATIONAL DEVELOPMENT DISTRICT FOR COMPREHENSION OF GRAPHIC MATERIAL

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Graphic Materials Subtest

Educational Development District	Number of pupils	Average grade equivalent score	Percentage of pupils meeting the criterion
1	273	10.8	53
2	313	10.2	38
3	126	10.4	42
4	447	10.2	40
5	295	10.1	36
6	111	10.4	45
7	465	10.4	41
8	363	12.0*	70
9	250	10.0	41
10	188	10.3	42
11	208	9.6	35
12	372	8.9	25
13	608	9.3	29
14	213	9.9	32
15	353	10.3	40
16	60	9.6	32
Kentucky--Statewide	4,645	10.1	39

*Criterion of 11.7 percent attained

Conclusion

The assessment results presented in Table 39 indicate the existence of learner needs in all of the sixteen Educational Development Districts reporting. The percentage of pupils attaining the criterion of a grade equivalency of 11.7 ranged from 25 percent to 70 percent.

Item analysis data, listed by study skills/graphic material skills/concepts for individual Educational Development Districts may be reviewed in Appendix F.

Results for boys and girls for the Graphic Materials Subtest by Educational Development District are presented in Appendix E.

Performance Objective 1.1.10.1

> During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of symbols, legends, and data presented in graphic and tabular form by attaining an average level of correct answers equal to or exceeding the criterion (55 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Symbols, Legends, and Data Presented in Graphic and Tabular Form

Test Situation: Pupils were asked to look at and to use graphic materials and choose correct answers to questions relating to the symbols, legends, and data presented in these materials.

Item: (A graph presenting the average income levels by areas in Kentucky) In which area was there the highest income level in 1965-70?

a. Area I
b. Area II
c. Area III
d. Area IV

Results

The average level of items correct for comprehension of symbols, legends, and data presented in graphic and tabular form for each Educational Development District is provided in Table 40.

The average percentage of correct items for 11.7 grade equivalency for the Comprehensive Test of Basic Skills, Form Q, Level 4 has not been established. The average percentage of correct items for 10.6 grade equivalency was selected as the expected criterion level for each specific skill/concept area.

TABLE 40

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF SYMBOLS, LEGENDS, AND DATA PRESENTED IN GRAPHIC AND TABULAR FORM

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Graphic Materials Subtest, Item Numbers 25, 27, 32, 37, 49

Educational Development District	Number of pupils	Average Percentage of correct answers
1	281	54
2	251	53
3	126	55*
4	342	55*
5	249	57*
6	185	43
7	396	55*
8	384	59*
9	224	53
10	160	56*
11	62	56*
12	283	47
13	553	50
14	176	43
15	251	55*
16	60	55*
Kentucky--Statewide	3,983	53

*Criterion average of 55 percent attained

Conclusion

The assessment results presented in Table 40 indicate the existence of learner needs in seven of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 43 percent to 59 percent. This range can be compared to an average expected criterion of 55 percent correct responses for items related to comprehension of symbols, legends, and data presented in graphic and tabular form.

Item analysis data for performance objective 1.1.10.1 are provided in Appendix F.

Performance Objective 1.1.10.2

> During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of relationships presented in graphical form by attaining an average level of correct answers equal to or exceeding the criterion (68 percent) as measured by the related items of the Study Skills/ Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension of Relationships Presented in Graphic Form

Test Situation: Pupils were asked to look at and to use graphic materials and to choose the correct answer to questions relating to relationships presented in the graph.

Item: (A graph presenting the average income levels by areas in Kentucky) For which two areas was the average income level the same in 1960-1965?

a. Area I
b. Area II
c. Area III
d. Area IV

Results

The average level of items correct for comprehension of relationships presented in graphic form for each Educational Development District is provided in Table 41.

TABLE 41

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION OF RELATIONSHIPS PRESENTED IN GRAPHICAL FORM

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Graphic Materials Subtest
Item Numbers 21, 24, 26, 28, 30, 41-44

Educational Development District	Numbers of pupils	Average Percentage of correct answers
1	281	70*
2	251	70*
3	126	72*
4	342	71*
5	249	69*
6	185	53
7	396	72*
8	384	75*
9	224	70*
10	160	69*
11	62	72*
12	283	54
13	553	63
14	176	58
15	251	72*
16	60	69*
Kentucky--Statewide	3,983	67

*Criterion average of 68 percent attained

Conclusion

Results related to comprehension of relationships presented in graphical form presented in Table 41 indicate the existence of learner needs in four of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 54 to 75 percent. This range can be compared to an average expected criterion of 68 percent correct responses for the related items.

Item analysis data for performance objective 1.1.10.2 are provided in Appendix F.

Performance Objective 1.1.10.3

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (draw conclusions) of graphic data by attaining an average level of correct answers equal to or exceeding the criterion (52 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Comprehension (Draw Conclusions) of Graphic Data

Test Situation: Pupils were asked to look at and to use graphic materials and choose the correct answer to questions involving drawing conclusions from the material.

Item: (A graph presenting the average income levels by areas in Kentucky) In 1965-70, which area had three times the average income level of Area I?

a. Area I
b. Area II
c. Area III
d. Area IV

Results

The average level of items correct for comprehension (draw conclusions) of graphic data for each Educational Development District is provided in Table 42.

TABLE 42

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' COMPREHENSION (DRAW CONCLUSIONS) OF GRAPHIC DATA

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Graphic Materials Subtest,
Item Numbers 22, 23, 29, 31, 33, 36, 40, 46-48, 50

Educational Development District	Number of pupils	Average percentage of correct answers
1	281	61*
2	251	60*
3	126	63*
4	342	63*
5	249	62*
6	185	46
7	396	62*
8	384	68*
9	224	59*
10	160	61*
11	62	59*
12	283	47
13	553	55*
14	176	49
15	251	63*
16	60	56*
Kentucky--Statewide	3,983	59*

*Criterion average of 52 percent attained

Conclusion

The assessment results presented in Table 42 indicate the existence of learner needs in three of the sixteen Educational Development Districts reporting. The average percentage of correct answers by Educational Development District ranged from 47 percent to 68 percent. This range can be compared to an average expected criterion of 52 percent correct responses for items related to comprehension (draw conclusions) of graphic data.

Item analysis data for performance objective 1.1.10.3 are provided in Appendix F.

Performance Objective 1.1.10.4

During the spring semester of the eleventh grade, Kentucky pupils will demonstrate the ability to analyze graphic data and determine extended meaning by attaining an average level of correct answers equal to or exceeding the criterion (58 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Sample Assessment Item for Analysis of Graphic Data to Determine Extended Meaning

Test Situation: Pupils were asked to look at and to use graphic material and choose the correct answers to questions of extending the meanings presented in the material.

Item: (A graph presenting the average income levels by areas in Kentucky) If the average income levels continue in this manner, which area will have the greatest average income level in 1970-1975?

a. Area I
b. Area II
c. Area III
d. Area IV

Results

The average level of items correct for analysis of graphic data to determine extended meaning for each Educational Development District is provided in Table 43.

TABLE 43

AVERAGE PERCENTAGE OF CORRECT ANSWERS BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE PUPILS' ANALYSIS OF GRAPHIC DATA AND DETERMINATION OF EXTENDED MEANING

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Graphic Materials Subtest, Item Numbers 34, 35, 38, 39, 45

Educational Development District	Number of pupils	Average Percentage of correct answers
1	281	58*
2	251	58*
3	126	56
4	342	58*
5	249	59*
6	185	45
7	396	61*
8	384	68*
9	224	54
10	160	54
11	62	57
12	283	46
13	553	53
14	176	48
15	251	64*
16	60	53
Kentucky--Statewide	3,983	56

*Criterion average of 58 percent attained

Conclusion

Results related to analysis of graphic data and determination of extended meanings which are presented in Table 43 indicate the existence of learner needs in nine of the sixteen Educational Development Districts reporting. The average percentage of correct responses by Educational Development District ranged from 46 percent to 68 percent. This range can be compared to an average expected criterion of 58 percent correct responses for the related items.

Item analysis data for performance objective 1.1.10.4 are provided in Appendix F.

Attitude Toward School

Performance Objective 1.7.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward school by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Attitude Toward School Statements

The following statements were presented to eleventh grade pupils to assess the response of pupils toward school. The directional response which was considered positive is included in parenthesis following each statement.

Statement #1. School is fair to students. (agreement)
Statement #2. I often get discouraged in school. (disagreement)
Statement #3. I am thinking about quitting school. (disagreement)
Statement #4. I often feel upset in school. (disagreement)
Statement #5. I believe I am getting a good education in school. (agreement)
Statement #6. Coming to school is worthwhile. (agreement)
Statement #7. My grades in school discourage me. (disagreement)
Statement #8. I can get information at school concerning college and future work. (agreement)

The percentage of eleventh grade pupils responding positively to each of the attitude toward school statements in each Educational Development District and statewide is presented in Table 44.

TABLE 44

PERCENTAGE OF ELEVENTH GRADE PUPILS RESPONDING POSITIVELY TO THE INDIVIDUAL STATEMENTS RELATED TO ATTITUDE TOWARD SCHOOL BY EDUCATIONAL DEVELOPMENT DISTRICT

Kentucky Student Attitude Inventory, Attitude Toward School

Educational Development District	Number of pupils	Percentage of positive responses by statement							
		1	2	3	4	5	6	7	8
1	275	71*	46	89*	61*	76*	84*	69*	87*
2	632	63*	47	96*	65*	79*	93*	70*	92*
3	151	51*	41	87*	51*	73*	80*	69*	88*
4	465	66*	44	94*	64*	81*	89*	71*	89*
5	338	59*	41	92*	60*	78*	91*	73*	90*
6	194	66*	39	89*	59*	75*	89*	65*	90*
7	477	60*	47	89*	61*	80*	83*	66*	90*
8	357	58*	30	82*	55*	64*	69*	66*	83*
9	186	63*	46	86*	64*	84*	91*	67*	87*
10	254	55*	32	89*	55*	79*	72*	58*	88*
11	202	53*	34	87*	55*	83*	89*	62*	90*
12	337	61*	33	89*	59*	82*	91*	65*	87*
13	650	57*	40	86*	55*	78*	87*	67*	89*
14	273	60*	39	67*	57*	75*	89*	67*	89*
15	276	57*	34	91*	58*	72*	88*	66*	87*
16	65	54*	44	94*	57*	60*	86*	62*	94*
Kentucky--Statewide	4,808	67*	40	89*	58*	77*	86*	67*	88*

*Criterion percentage of 50 percent attained

Conclusion

Results related to attitude toward school presented in Table 44 indicate that 50 percent or more of the eleventh grade pupils gave the desired directional response to statement numbers 1, 3, and 5 through 8 for all Educational Development Districts. However, a learner need was indicated in some districts for statement numbers 2 and 4.

Attitude Toward Reading

Performance Objective 1.7.2

During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward reading by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Attitude Toward Reading Statements

The following statements were presented to eleventh grade pupils to assess the response of pupils toward reading. The directional response which was considered positive is included in parenthesis following each statement.

Statement #1. I like to read before I go to bed. (agreement)
Statement #2. I am not a very good reader. (disagreement)
Statement #3. Reading is one of my favorite activities. (agreement)
Statement #4. Reading is not very important. (disagreement)
Statement #5. When I have some free time, I like to read a book. (agreement)
Statement #6. I like to read hard books. (agreement)
Statement #7. I like to answer questions about things I have read in school. (agreement)
Statement #8. Most school books are not very interesting. (disagreement)

The percentage of eleventh grade pupils responding positively to each of the attitude toward reading statements in each Educational Development District and statewide is presented in Table 45.

TABLE 45

PERCENTAGE OF ELEVENTH GRADE PUPILS RESPONDING POSITIVELY TO THE INDIVIDUAL STATEMENTS RELATED TO ATTITUDE TOWARD READING BY EDUCATIONAL DEVELOPMENT DISTRICT

Kentucky Student Attitude Inventory, Attitude Toward Reading

Educational Development District	Number of pupils	Percentage of positive responses by statement							
		1	2	3	4	5	6	7	8
1	275	49	75*	40	92*	58*	31	47	37
2	632	52*	76*	40	94*	57*	27	51*	41
3	151	47	79*	44	89*	60*	35	48	41
4	465	50*	79*	43	92*	61*	39	56*	39
5	338	45	70*	37	92*	53*	23	47	39
6	194	43	76*	32	92*	54*	27	48	38
7	477	44	75*	36	90*	52*	32	45	35
8	357	45	70*	31	87*	42	28	38	35
9	186	52*	71*	45	91*	63*	35	55*	40
10	254	51*	76*	39	91*	53*	25	45	33
11	202	49	68*	36	91*	60*	36	58*	35
12	337	50*	73*	41	91*	58*	34	51*	43
13	650	53*	73*	43	89*	62*	36	52*	42
14	273	46	73*	43	91*	56*	29	43	39
15	276	52*	78*	38	90*	55*	30	52*	42
16	65	57*	68*	43	97*	69*	33	42	32
Kentucky--Statewide	4,808	49	73*	39	91*	57*	31	49	39

*Criterion percentage of 50 percent attained

Conclusion

Results related to attitude toward reading presented in Table 45 indicate that 50 percent or more of the eleventh grade pupils gave the desired directional (positive) response to statement numbers 2 and 4 for all Educational Development Districts. However, a learner need was indicated in some districts for statement numbers 1, 3, and 5 through 8.

Performance Objective 1.7.3

During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward arithmetic by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Attitude Toward Arithmetic Statements

The following statements were presented to eleventh grade pupils to assess the response of pupils toward arithmetic. The directional response which was considered positive is included in parenthesis following each statement.

Statement #1. Math is interesting to me. (agreement)
Statement #2. Math is not my favorite subject. (disagreement)
Statement #3. I would like to spend more time in working math problems. (agreement)
Statement #4. Math is not very important. (disagreement)
Statement #5. Working out math problems is interesting. (agreement)
Statement #6. Math really makes me feel good. (agreement)
Statement #7. I don't like to explain math problems. (disagreement)
Statement #8. I would like to spend more time working with math. (agreement)

The percentage of eleventh grade pupils responding positively to each of the attitude toward arithmetic statements in each Educational Development District and statewide is presented in Table 46.

TABLE 46

PERCENTAGE OF ELEVENTH GRADE PUPILS RESPONDING POSITIVELY TO THE INDIVIDUAL STATEMENTS RELATED TO ATTITUDE TOWARD ARITHMETIC BY EDUCATIONAL DEVELOPMENT DISTRICT

Kentucky Student Attitude Inventory, Attitude Toward Arithmetic

Educational Development District	Number of pupils	Percentage of positive responses by statement							
		1	2	3	4	5	6	7	8
1	275	57*	38	36	89*	57*	31	33	36
2	632	54*	38	35	92*	61*	29	31	36
3	151	38	31	39	83*	50*	31	34	39
4	465	53*	30	22	90*	58*	28	33	37
5	338	49	31	26	87*	53*	22	27	28
6	194	56*	41	33	86*	54*	36	33	33
7	477	54*	38	33	88*	56*	27	31	49
8	357	38	31	20	86*	51*	16	27	26
9	186	49	32	27	90*	52*	24	31	23
10	254	50*	35	29	87*	54*	29	28	34
11	202	38	26	28	82*	45	19	27	28
12	337	47	31	17	83*	50*	23	34	34
13	650	58*	38	33	84*	58*	37	40	36
14	273	51*	37	26	88*	51*	20	31	28
15	276	54*	35	28	88*	59*	29	34	33
16	65	46	31	27	86*	50*	22	13	21
Kentucky--Statewide	4,808	51*	34	30	86*	54*	25	32	34

*Criterion percentage of 50 percent attained

Conclusion

Results related to attitude toward arithmetic presented in Table 46 indicate that 50 percent or more of the eleventh grade pupils gave the desired directional response to statement number 4 for all Educational Development Districts. However, a learner need was indicated in some districts for statement numbers 1 through 3 and 5 through 8.

GOAL AREA III: HUMAN RELATIONSHIPS

Goal 3.2: Each citizen of the Commonwealth should have an understanding of the worth and dignity of other people.

The assessment of Goal 3.2 involved measurement of affective behavior concerning attitude toward peers. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eighth grade pupils who responded in the desired manner to the individual attitudinal questions. A criterion of 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 3.2 are presented below.

Performance Objective 3.2.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward peers by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Attitude Toward Peers Statements

The following statements were presented to eleventh grade pupils to assess the response of pupils toward peers. The directional response which was considered positive is included in parenthesis following each statement.

Statement #1.	Making friends at school is easy. (agreement)
Statement #2.	I like my classmates. (agreement)
Statement #3.	I don't care if I make the same grades as my friends. (disagreement)
Statement #4.	Students in my school make other students feel welcome. (agreement)

Statement #5. I look forward to seeing my friends at school. (agreement)
Statement #6. I have lots of friends in school. (agreement)
Statement #7. My friends have difficulty with reading. (disagreement)
Statement #8. I get discouraged with my friends. (disagreement)

The percentage of eleventh grade pupils responding positively to each of the attitude toward peers statements in each Educational Development District and statewide is presented in Table 47.

TABLE 47

PERCENTAGE OF ELEVENTH GRADE PUPILS RESPONDING POSITIVELY TO THE INDIVIDUAL STATEMENTS RELATED TO ATTITUDE TOWARD PEERS BY EDUCATIONAL DEVELOPMENT DISTRICT

Kentucky Student Attitude Inventory, Attitude Toward Peers

Educational Development District	Number of pupils	Percentage of positive responses by statement							
		1	2	3	4	5	6	7	8
1	275	66*	94*	41	64*	94*	81*	82*	62*
2	632	84*	75*	46	59*	95*	89*	85*	66*
3	151	79*	84*	37	59*	94*	85*	88*	67*
4	465	79*	95*	41	63*	92*	87*	75*	62*
5	338	81*	94*	34	66*	94*	88*	86*	65*
6	194	83*	95*	38	56*	93*	86*	88*	66*
7	477	81*	93*	37	57*	92*	88*	86*	67*
8	357	75*	84*	30	52*	84*	79*	84*	78*
9	186	85*	97*	33	73*	94*	89*	83*	59*
10	254	79*	94*	42	61*	91*	86*	83*	58*
11	202	86*	97*	42	70*	92*	91*	82*	60*
12	337	80*	96*	41	65*	94*	90*	83*	65*
13	650	81*	95*	44	62*	92*	89*	83*	60*
14	273	84*	96*	37	65*	93*	89*	85*	69*
15	276	78*	92*	38	54*	90*	80*	88*	65*
16	65	77*	95*	42	63*	91*	83*	91*	66*
Kentucky--Statewide	4,808	80*	94*	40	62*	92*	87*	84*	63*

*Criterion percentage of 50 percent attained

Conclusion

Results related to attitude toward peers presented in Table 47 indicate that 50 percent or more of the eleventh grade pupils gave the desired directional response to statement numbers 1, 2 and 4 through 8 for all Educational Development Districts. However, a learner need was indicated in some districts for statement #3.

GOAL AREA IV: CITIZENSHIP

Goal 4.3: Each citizen of the Commonwealth should have a knowledge of the interdependence of the individual's rights and responsibilities in a democracy.

The assessment of Goal 4.3 involved measurement of affective behavior concerning attitude toward citizenship. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eighth grade pupils who responded in the desired manner to the individual attitudinal questions. A criterion of 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 4.3 are presented below.

Performance Objective 4.3.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward citizenship by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Attitude Toward Citizenship Statements

The following statements were presented to eleventh grade pupils to assess the response of pupils toward citizenship. The directional response which was considered positive is included in parenthesis following each statement.

Statement #1. If everyone disobeys a civil law, then it is okay for me to disobey it too. (disagreement)
Statement #2. Democracy and the democratic processes should be practiced within the school. (agreement)
Statement #3. To succeed in politics, one must compromise his principles. (disagreement)

Statement #4. I feel that everyone should register and vote. (agreement)

Statement #5. I believe that every student should be taught to respect the laws of the government. (agreement)

Statement #6. It has been said that the simplest form of government has its origin in the home. (agreement)

Statement #7. I believe that for every right and privilege there is a corresponding responsibility. (agreement)

Statement #8. It is important to understand the purpose, structure, and functioning of the United Nations. (agreement)

The percentage of eleventh grade pupils responding positively to each of the attitude toward citizenship statements in each Educational Development District and statewide is presented in Table 48.

TABLE 48

PERCENTAGE OF ELEVENTH GRADE PUPILS RESPONDING POSITIVELY TO THE INDIVIDUAL STATEMENTS RELATED TO ATTITUDE TOWARD CITIZENSHIP BY EDUCATIONAL DEVELOPMENT DISTRICT

Kentucky Student Attitude Inventory, Attitude Toward Citizenship

Educational Development District	Number of pupils	Percentage of positive responses by statement							
		1	2	3	4	5	6	7	8
1	275	87*	85*	23	87*	95*	92*	96*	85*
2	632	81*	90*	21	87*	96*	90*	97*	91*
3	151	85*	83*	28	75*	92*	92*	90*	86*
4	465	88*	83*	21	85*	96*	88*	96*	85*
5	338	89*	83*	22	85*	93*	89*	94*	82*
6	194	87*	80*	25	85*	95*	88*	94*	79*
7	477	89*	81*	23	82*	92*	87*	95*	84*
8	357	91*	80*	24	76*	87*	82*	94*	70*
9	186	88*	86*	23	86*	95*	90*	93*	85*
10	254	88*	83*	25	81*	93*	86*	95*	79*
11	202	80*	76*	45	84*	90*	71*	84*	78*
12	337	86*	83*	22	90*	95*	84*	94*	90*
13	650	86*	80*	21	86*	93*	84*	92*	87*
14	273	89*	74*	21	88*	94*	90*	94*	83*
15	276	88*	85*	22	82*	94*	84*	92*	79*
16	65	98*	84*	31	83*	96*	91*	97*	89*
Kentucky--Statewide	4,808	88*	83*	23	84*	93*	87*	95*	83*

*Criterion percentage of 50 percent attained

Conclusion

Results related to attitude toward citizenship presented in Table 48 indicate that 50 percent or more of the eleventh grade pupils gave the desired directional response to statement numbers 1, 2, and 4 through 8 for all Educational Development Districts. However, a learner need was indicated in some districts for statement number 3.

GOAL AREA VI: PHYSICAL AND MENTAL WELL BEING

Goal 6.3: Each citizen of the Commonwealth should have a positive and realistic acceptance of self.

The assessment of Goal 6.3 involved measurement of affective behavior concerning attitude toward self. It was determined that affective behavior assessment results compiled from the Kentucky Student Attitude Inventory would be reported in relation to the percentage of eleventh grade pupils who responded in the desired manner to the individual attitudinal questions. A criterion of 50 percent or greater positive pupil response was established as the level of desired performance. The Kentucky Student Attitude Inventory is provided in Appendix D. The results for Goal 6.3 are presented below.

Performance Objective 6.3.1

> During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward self by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

Attitude Toward Self Statements

The following statements were presented to eleventh grade pupils to assess the response of pupils toward self. The directional response which was considered positive is included in parenthesis following each statement.

Statement #1. I make friends easily. (agreement)
Statement #2. I generally feel comfortable in my classes. (agreement)
Statement #3. I am not very cheerful. (disagreement)
Statement #4. If I have something to say, I generally say it. (agreement)
Statement #5. I am easy to like. (agreement)
Statement #6. My classmates do better in school than I do. (disagreement)
Statement #7. My studying is not satisfactory. (disagreement)
Statement #8. I know my subjects very well. (agreement)

The percentage of eleventh grade pupils responding positively to each of the attitude toward self statements in each Educational Development District and statewide is presented in Table 49.

TABLE 49

PERCENTAGE OF ELEVENTH GRADE PUPILS RESPONDING POSITIVELY TO THE INDIVIDUAL STATEMENTS RELATED TO ATTITUDE TOWARD SELF BY EDUCATIONAL DEVELOPMENT DISTRICT

Kentucky Student Attitude Inventory, Attitude Toward Self

Educational Development District	Number of pupils	Percentage of positive responses by statement							
		1	2	3	4	5	6	7	8
1	275	89*	84*	82*	79*	85*	69*	55*	53*
2	320	93*	87*	84*	71*	88*	68*	55*	53*
3	151	94*	73*	83*	96*	87*	75*	60*	54*
4	465	94*	84*	88*	70*	85*	71*	52*	61*
5	338	91*	80*	56*	61*	87*	72*	51*	54*
6	194	94*	80*	83*	73*	92*	71*	50*	51*
7	477	93*	82*	86*	69*	88*	70*	58*	53*
8	357	90*	80*	83*	68*	84*	78*	54*	51*
9	186	96*	83*	83*	66*	90*	68*	51*	56*
10	254	91*	81*	86*	69*	86*	71*	50*	52*
11	202	96*	84*	89*	72*	93*	91*	72*	56*
12	337	94*	82*	82*	71*	90*	67*	91*	53*
13	650	93*	79*	84*	82*	88*	67*	53*	57*
14	273	91*	80*	83*	71*	88*	62*	52*	50*
15	276	92*	90*	84*	68*	83*	69*	43	56*
16	65	89*	87*	86*	67*	86*	74*	48	57*
Kentucky--Statewide	4,808	92*	81*	84*	70*	87*	69*	53*	54*

*Criterion percentage of 50 percent attained

Conclusion

Results related to attitude toward self presented in Table 49 indicate that 50 percent or more of the eleventh grade pupils gave the desired directional response to statement numbers 1 through 6 and 8. However, a learner need was indicated in several districts for statement #7.

LIST OF REFERENCES

Bloom, Benjamin S., et al. Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay Company, Inc., 1956.

Goals of Education in Kentucky. Frankfort, Kentucky: State Department of Education, 1973.

Krathwohl, David R., et al. Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, Inc., 1956.

APPENDIX A

GOALS OF EDUCATION IN KENTUCKY

GOALS OF EDUCATION IN KENTUCKY

GOAL AREA I: GENERAL EDUCATION

1.1 Skill in written and oral communication, reading, computation, and mathematical concepts

1.2 Understand the language common to the various learning disciplines

1.3 Knowledge of logical approaches for problem solving

1.4 Application of acquired skills to real-life situations

1.5 Knowledge in the various learning disciplines (e.g. science, social science, foreign language, etc.)

1.6 Understand the resources available and the methods of collecting information

1.7 Positive attitude toward the acquisition of knowledge - both formal and informal

GOAL AREA II: ECONOMIC UNDERSTANDING

2.1 Consumer knowledge

2.2 Information on tax structures and obligations

2.3 An understanding of money management

2.4 A knowledge of the American economic system in relation to international economics

2.5 Demonstrate economic independence

GOAL AREA III: HUMAN RELATIONSHIPS

3.1 Knowledge of one's self in relation to capabilities and interests

3.2 Understanding the worth and dignity of other people

3.3 Ability to work with and relate to other individuals and groups

3.4 Appreciation of our culture and those attributes which have enabled man to survive and accomplish

GOAL AREA IV: CITIZENSHIP

4.1 Understanding the necessity for structured social and political organization

4.2 Understanding the necessity for ethical values in determining right from wrong

4.3 Knowledge of the interdependence of the individual's rights and responsibilities in a democracy

4.4 Awareness of one's relationship to his physical environment and the wise use of resources

4.5 Understanding the effects of technology and of population growth on the environment

4.6 Attitude of cooperation for the betterment of one's community and society

4.7 Understanding the relationship of historical occurrences to present and future planning

4.8 Knowledge of international relationships

4.9 Awareness of the importance of involvement in community affairs

GOAL AREA V: CREATIVE, CONSTRUCTIVE AND CRITICAL THINKING

5.1 Ability to examine constructively and creatively

5.2 Development of individual creative talents

5.3 Respect for creative contributions of others

5.4 Application of the logical processes (e.g. research, analysis, evaluation, etc.)

5.5 Critical awareness of the less obvious qualities or conditions which contribute to total understanding

GOAL AREA VI: PHYSICAL AND MENTAL WELL BEING

6.1 Develop physical fitness through appropriate activities

6.2 Understanding of the body processes and functions

6.3 A positive and realistic acceptance of self

6.4 Development of skills for and appreciation of leisure time activities

6.5 Understanding and value for good nutritional habits

GOAL AREA VII: OCCUPATIONAL COMPETENCE

7.1 Understanding the contributions of occupations to society

7.2 Understanding of the variety of career opportunities

7.3 Acquisition of occupational skills (entry and maintenance skills)

7.4 Ability to cope with changing occupational requirements and demands

GOAL AREA VIII: CULTURAL APPRECIATION

8.1 Acquisition of knowledge of art, musical, literary and drama forms

8.2 Understanding of and value for the historical and cultural heritage

8.3 Development of aesthetic values

8.4 Expression of cultural values

APPENDIX B

HIERARCHY OF GOALS AND PERFORMANCE OBJECTIVES

HIERARCHY OF GOALS AND PERFORMANCE OBJECTIVES

GRADE 11

Kentucky Educational Assessment Program (1974)

GOAL AREA I: GENERAL EDUCATION

Goal 1.1: Each citizen of the Commonwealth should be assured an opportunity to realize his full potential in written and oral communication, reading, computation, and mathematical concepts.

Related Performance Objectives

1.1.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of vocabulary by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Reading Vocabulary Subtest of the Comprehensive Tes[illegible] of Basic Skills, Form Q, Level 4.

  [illegible].1.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of the meaning of words in context by attaining an average level of correct answers equal to or exceeding the criterion (69 percent) as measured by the related items of the Reading Vocabulary Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate reading comprehension by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

  1.1.2.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (paraphrasing) of the meaning of ideas by attaining an average level of correct answers equal to or exceeding the criterion (78 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

  1.1.2.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of main ideas by attaining an average level of correct answers equal to or exceeding the criterion (74 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

  1.1.2.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of relationships by attaining an average level of correct answers equal to or exceeding the criterion (72 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.2.4 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (draw conclusions) of given facts and statements by attaining an average level of correct answers equal to or exceeding the criterion (61 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.2.5 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (inference) of contextual clues by attaining an average level of correct answers equal to or exceeding the criterion (63 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.2.6 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of indefinite or incomplete statements (extended meaning) by attaining an average level of correct answers equal to or exceeding the criterion (59 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.2.7 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of the tone, mood, and intention of the author by attaining an average level of correct answers equal to or exceeding the criterion (59 percent) as measured by the related items of the Reading Comprehension Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of spelling by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language/Spelling Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.3.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of correctly or incorrectly spelled words by attaining an average level of correct answers equal to or exceeding the criterion (67 percent) as measured by the related items of the Language/Spelling Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.4 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of the mechanics of language by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.4.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of punctuation skills by attaining an average level of correct answers equal to or exceeding the criterion (71 percent) as measured by the related items of the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.4.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of capitalization skills by attaining an average level of correct answers equal to or exceeding the criterion (62 percent) as measured by the related items of the Language Mechanics Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.5 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of language expression by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.5.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of correct grammatical usage by attaining an average level of correct answers equal to or exceeding the criterion (74 percent) as measured by the related items of the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.5.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of clarity and/or economy of expression by attaining an average level of correct answers equal to or exceeding the criterion (59 percent) as measured by the related items of the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.5.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of the author's intention (word choice) by attaining an average level of correct answers equal to or exceeding the criterion (71 percent) as measured by the related items of the Language Expression Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.6 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of arithmetic computation by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.6.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of addition skills by attaining an average level of correct answers equal to or exceeding the criterion (76 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.6.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of subtraction skills by attaining an average level of correct answers equal to or exceeding the criterion (72 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.6.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of multiplication skills by attaining an average level of correct answers equal to or exceeding the criterion (79 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.6.4 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of division skills by attaining an average level of correct answers equal to or exceeding the criterion (72 percent) as measured by the related items of the Arithmetic Computation Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.7 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of arithmetic concepts by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.7.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of arithmetic concepts by attaining an average level of correct answers equal to or exceeding the criterion (60 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.7.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of arithmetic concepts (converting form) by attaining an average level of correct answers equal to or exceeding the criterion (70 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.7.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of equations by attaining an average level of correct answers equal to or exceeding the criterion (65 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.7.4 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of comparative relationships by attaining an average level of correct answers equal to or exceeding the criterion (82 percent) as measured by the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.7.5 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of the components of arithmetic problems (organization) by attaining an average level of correct answers equal to or exceeding the criterion (66 percent) as measured by the related items of the Arithmetic Concepts Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.8 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate application of skills in solving arithmetic word problems by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.8.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of relationships (ratio, time, part-whole, sequence, geometric) by attaining an average level of correct answers equal to or exceeding the criterion (78 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.8.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of problem-solving (selecting methods) by attaining an average level of correct answers equal to or exceeding the criterion (71 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.8.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of problem-solving (correct solution) by attaining an average level of correct answers equal to or exceeding the criterion (61 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.8.4 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate analysis of the components of arithmetic word problems by attaining an average level of correct answers equal to or exceeding the criterion (65 percent) as measured by the related items of the Arithmetic Application Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.9 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of reference material techniques by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Study Skills/Reference Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.9.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of dictionary use by attaining an average level of correct answers equal to or exceeding the criterion (77 percent) as measured by the related items of the Study Skills/Reference Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.9.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate knowledge of library use by attaining an average level of correct answers equal to or exceeding the criterion (69 percent) as measured by the related items of the Study Skills/Reference Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.10 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of graphic materials by attaining an average grade equivalent score equal to or exceeding the criterion (11.7) as measured by the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.10.1 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of symbols, legends, and data presented in graphic and tabular form by attaining an average level of correct answers equal to or exceeding the criterion (55 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.10.2 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension of relationships presented in graphical form by attaining an average level of correct answers equal to or exceeding the criterion (68 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.10.3 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate comprehension (draw conclusions) of graphic data by attaining an average level of correct answers equal to or exceeding the criterion (52 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

1.1.10.4 During the spring semester of the eleventh grade, Kentucky pupils will demonstrate the ability to analyze graphic data and determine extended meaning by attaining an average level of correct answers equal to or exceeding the criterion (58 percent) as measured by the related items of the Study Skills/Graphic Materials Subtest of the Comprehensive Tests of Basic Skills, Form Q, Level 4.

Goal 1.7: Each citizen of the Commonwealth should be assured an opportunity to develop a positive attitude toward the acquisition of knowledge - both formal and informal.

Related Performance Objectives

1.7.1 During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward school by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

1.7.2 During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward reading by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

1.7.3 During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward arithmetic by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

GOAL AREA III: HUMAN RELATIONSHIPS

Goal 3.2: Each citizen of the Commonwealth should have an understanding of the worth and dignity of other people.

Related Performance Objective

3.2.1 During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward peers by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

GOAL AREA IV: CITIZENSHIP

Goal 4.3: Each citizen of the Commonwealth should have a knowledge of the interdependence of the individual's rights and responsibilities in a democracy.

Related Performance Objective

4.3.1 During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward citizenship by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

GOAL AREA VI: PHYSICAL AND MENTAL WELL BEING

Goal 6.3: Each citizen of the Commonwealth should have a positive and realistic acceptance of self.

Related Performance Objectives

6.3.1 During the spring semester of the eleventh grade, Kentucky pupils will respond positively toward self by demonstrating a directional response equal to or exceeding the criterion (50 percent) on the related individual items of the Kentucky Student Attitude Inventory.

APPENDIX C

KENTUCKY STUDENT ATTITUDE INVENTORY

KENTUCKY EDUCATIONAL NEEDS ASSESSMENT

Student Attitude Inventory, Grades 8 and 11

Directions to Test Administrators

1. Pass out the questionnaire.
2. Pass out separate answer sheet.
3. Read over the directions with the students.
4. Insure that grade level, sex, and district number are indicated on each answer sheet.
5. Answer any individual questions concerning the instrument.

(NOTE TO THE TEST ADMINISTRATORS: Read each question twice to the students and be sure the students use a soft lead pencil, No. 1 or No. 2, to mark the answer sheet.)

Because the answer sheets will be machine scored, please check each sheet, after collecting, to insure that the circles filled in by the student are sufficiently dark and that other stray marks are eliminated from the paper.

STUDENT QUESTIONNAIRE

These questions are different from the usual school questions. They are about how you feel and have no right or wrong answer.

Do not put your name on this paper or on the separate answer sheet. No one will know what your answers are. On the answer sheet, circle "Male" if you are a boy, or "Female" if you are a girl. Write the number of your district in the spaces under identification number and then darken the appropriate circle in the column under each space. Now darken the circle in the section for grade that corresponds to your grade level.

Remember, there are no right or wrong answers and no one will know what your answers are. Answer honestly how you feel about each statement. Darken the circle "A" (strongly agree), "B" (agree), "C" (disagree), or "D" (strongly disagree) for each statement. Take your time, and mark what your feelings are. Darken the appropriate circle on your separate answer sheet to correspond with your intended answer.

Any of the circles in the "E" column do not apply to this questionnaire. Be careful to avoid marking these circles under the "E". Answer only in one of the first four spaces.

Example: A B C D E (Remember Do Not Mark "E".)
○ ● ○ ○ ○

Start with number 1 and go through 40 on the separate answer sheet.

		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I make friends easily.	(A)	(B)	(C)	(D)
2.	I generally feel comfortable in my classes.	(A)	(B)	(C)	(D)
3.	I am not very cheerful.	(A)	(B)	(C)	(D)
4.	If I have something to say, I generally say it.	(A)	(B)	(C)	(D)
5.	I am easy to like.	(A)	(B)	(C)	(D)
6.	My classmates do better in school than I do.	(A)	(B)	(C)	(D)
7.	My studying is not satisfactory.	(A)	(B)	(C)	(D)
8.	I know my subjects very well.	(A)	(B)	(C)	(D)
9.	Making friends at school is easy.	(A)	(B)	(C)	(D)
10.	I like my classmates.	(A)	(B)	(C)	(D)
11.	I don't care if I make the same grades as my friends.	(A)	(B)	(C)	(D)
12.	Students in my school make other students feel welcome.	(A)	(B)	(C)	(D)
13.	I look forward to seeing my friends at school.	(A)	(B)	(C)	(D)
14.	I have lots of friends in school.	(A)	(B)	(C)	(D)
15.	My friends have difficulty with reading.	(A)	(B)	(C)	(D)
16.	I get discouraged with my friends.	(A)	(B)	(C)	(D)
17.	I like to read before I go to bed.	(A)	(B)	(C)	(D)
18.	I am not a very good reader.	(A)	(B)	(C)	(D)
19.	Reading is one of my favorite activities.	(A)	(B)	(C)	(D)
20.	Reading is not very important.	(A)	(B)	(C)	(D)
21.	When I have some free time, I like to read a book.	(A)	(B)	(C)	(D)
22.	I like to read hard books.	(A)	(B)	(C)	(D)

		Strongly Agree	Agree	Disagree	Strongly Disagree
23.	I like to answer questions about things I have read in school.	(A)	(B)	(C)	(D)
24.	Most school books are not very interesting.	(A)	(B)	(C)	(D)
25.	School is fair to students.	(A)	(B)	(C)	(D)
26.	I often get discouraged in school.	(A)	(B)	(C)	(D)
27.	I am thinking about quitting school.	(A)	(B)	(C)	(D)
28.	I often feel upset in school.	(A)	(B)	(C)	(D)
29.	I believe I am getting a good education in school.	(A)	(B)	(C)	(D)
30.	Coming to school is worthwhile.	(A)	(B)	(C)	(D)
31.	My grades in school discourage me.	(A)	(B)	(C)	(D)
32.	I can get information at school concerning college and future work.	(A)	(B)	(C)	(D)
33.	Math is interesting to me.	(A)	(B)	(C)	(D)
34.	Math is not my favorite subject.	(A)	(B)	(C)	(D)
35.	I would like to spend more time in working math problems.	(A)	(B)	(C)	(D)
36.	Math is not very important.	(A)	(B)	(C)	(D)
37.	Working out math problems is interesting.	(A)	(B)	(C)	(D)
38.	Math really makes me feel good.	(A)	(B)	(C)	(D)
39.	I don't like to explain math problems.	(A)	(B)	(C)	(D)
40.	I would like to spend more time working with math.	(A)	(B)	(C)	(D)

Read each statement carefully before answering. Then choose the letter that most accurately reflects your opinion. Darken the circle containing this letter on the separate answer sheet. Watch your question numbers!

61. If everyone disobeys a civil law, then it is okay for me to disobey it too. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

62. Democracy and the democratic processes should be practiced within the school. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

63. To succeed in politics, one must compromise his principles. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

64. I feel that everyone should register and vote. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

65. I believe that every student should be taught to respect the laws of government. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

66. It has been said that the simplest form of government has its origin in the home. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

67. I believe that for every right and privilege there is a corresponding responsibility. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

68. It is important to understand the purpose, structure, and functioning of the United Nations. _____
    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strongly disagree

APPENDIX D

SAMPLING PROCEDURES AND SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT, EDUCATIONAL DEVELOPMENT DISTRICT, AND STATEWIDE

SAMPLING PROCEDURES

The steps outlined below were implemented to select the sample of eleventh grade pupils by Educational Development District and Statewide.

Sample School District Selection

The following procedures were utilized to identify the school districts to participate in the testing sample.

1. All districts that had been previously selected randomly were asked to continue to participate in the assessment program.

2. In the planned expansion of the assessment program, new districts were selected by using a table of random numbers and listing all school districts in alphabetical order that had not participated in the previous two years. Forty new districts were selected by this method and invited to participate.

Sample Pupil Selection

In order that the resultant data be a valid indicator at the district level, a representative sample within each district was selected in the following manner:

> A random numbers generator was used to select pupils by computers for inclusion in the assessment sample. When data were not available from some of the school districts, the following procedures were followed to randomly select the required number of pupils of a given grade in the school district sample.
>
> > Every fifth pupil was selected, beginning with the row of pupils to the extreme left of the teacher as she faced her pupils, selecting the first pupil, continuing down each row until the required number had been selected.

The numbers of pupil participants selected for eleventh grade by school district, Educational Development District, and Statewide are presented in Table 50.

TABLE 50

ELEVENTH GRADE SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT AND EDUCATIONAL DEVELOPMENT DISTRICT

Educational Development District	Participating School District	Number of pupils in the sample
1	Calloway County	40
	Carlisle County	30
	Fulton Independent	44
	Mayfield Independent	41
	McCracken County	95
Total--Educational Development District #1		281
2	Caldwell County	32
	Central City Independent	26
	Crittenden County	29
	Dawson Springs Independent	26
	Greenville Independent	30
	Hopkins County	77
	Muhlenberg County	69
	Todd County	31
Total--Educational Development District #2		320
3	Hancock County	30
	Henderson Independent	34
	Providence Independent	30
	Webster County	32
Total--Educational Development District #3		126
4	Allen County	32
	Barren County	48
	Caverna Independent	30
	Hart County	28
	Logan County	30
	Monroe County	32
	Russellville Independent	30
	Simpson County	36
	Warren County	99
Total--Educational Development District #4		452

TABLE 50 (continued)

ELEVENTH GRADE SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT AND EDUCATIONAL DEVELOPMENT DISTRICT

Educational Development District	Participating School District	Number of pupils in the sample
5	Bardstown Independent	28
	Elizabethtown Independent	47
	Grayson County	47
	Marion County	63
	Nelson County	75
	Washington County	36
Total--Educational Development District #5		296
6	Henry County	30
	Oldham County	51
	Shelby County	74
	Spencer County	30
Total--Educational Development District #6		185
7	Bellevue Independent	30
	Boone County	77
	Campbell County	82
	Covington Independent	81
	Erlanger Independent	45
	Ft. Thomas Independent	41
	Gallatin County	30
	Grant County	29
	Newport Independent	25
	Pendleton County	31
Total--Educational Development District #7		471
8	Jefferson County	384
Total--Educational Development District #8		384

TABLE 50 (continued)

ELEVENTH GRADE SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT AND EDUCATIONAL DEVELOPMENT DISTRICT

Educational Development District	Participating School District	Number of pupils in the sample
9	Bracken County	29
	Fleming County	36
	Mason County	36
	Maysville Independent	30
	Montgomery County	40
	Mt. Sterling Independent	30
	Robertson County	24
	Rowan County	29
Total--Educational Development District #9		254
10	Ashland Independent	97
	Boyd County	63
	Fairview Independent	30
Total--Educational Development District #10		190
11	Paintsville Independent	32
	Pike County	149
	Pikeville Independent	30
Total--Educational Development District #11		211
12	Breathitt County	46
	Hazard Independent	28
	Jackson Independent	22
	Jenkins Independent	30
	Knott County	113
	Lee County	29
	Letcher County	69
	Owsley County	30
	Perry County	63
	Wolfe County	30
Total--Educational Development District #12		462

TABLE 50 (continued)

ELEVENTH GRADE SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT AND EDUCATIONAL DEVELOPMENT DISTRICT

Educational Development District	Participating School District	Number of pupils in the sample
13	Barbourville Independent	24
	Bell County	55
	Clay County	57
	Corbin Independent	29
	Harlan County	99
	Harlan Independent	30
	Knox County	64
	Laurel County	73
	Lynch Independent	30
	Middlesboro Independent	36
	Rockcastle County	44
	Whitley County	42
	Williamsburg Independent	30
Total--Educational Development District #13		613
14	Adair County	37
	Casey County	41
	Cumberland County	30
	Green County	30
	Monticello Independent	30
	Taylor County	30
	Wayne County	45
Total--Educational Development District #14		243
15	Anderson County	33
	Bourbon County	41
	Boyle County	31
	Frankfort Independent	30
	Georgetown Independent	35
	Harrodsburg Independent	24
	Jessamine County	33
	Nicholas County	30
	Paris Independent	29
	Scott County	35
	Woodford County	41
Total--Educational Development District #15		362

TABLE 50 (continued)

ELEVENTH GRADE SAMPLE SIZE BY PARTICIPATING SCHOOL DISTRICT AND EDUCATIONAL DEVELOPMENT DISTRICT

Educational Development District	Participating School District	Number of pupils in the sample
16	Berea Independent	25
	Estill County	35
Total--Educational Development District #16		60
TOTAL--Statewide		4,910

APPENDIX E

RESULTS OF ANALYSIS OF DATA FOR BOYS AND FOR GIRLS

TABLE 51

AVERAGE GRADE EQUIVALENCY SCORES IN READING FOR ELEVENTH GRADE PUPILS BY SEX AND EDUCATIONAL DEVELOPMENT DISTRICT

Comprehensive Tests of Basic Skills, Form Q, Level 4

Educational Development District	Number of pupils		Average grade equivalency Reading Vocabulary		Average grade equivalency Reading Comprehension	
	Boys	Girls	Boys	Girls	Boys	Girls
1	123	158	10.3	10.7	10.5	11.4
2	141	179	10.1	10.3	10.0	11.1
3	41	85	10.2	10.3	10.4	11.0
4	208	244	10.2	10.6	10.1	11.1
5	137	159	9.7	10.1	9.6	10.6
6	88	97	10.1	10.1	10.1	10.7
7	207	264	10.6	10.4	10.7	10.9
8	134	250	12.0	12.0	11.9	12.2
9	120	134	10.0	10.4	10.3	11.0
10	82	108	10.8	10.4	10.7	11.7
11	98	113	9.5	9.9	9.9	10.7
12	227	235	9.0	9.6	9.1	10.6
13	299	314	9.5	9.6	9.6	10.4
14	129	114	9.5	10.0	9.6	10.7
15	167	195	10.3	10.6	10.4	11.2
16	23	37	9.0	10.6	9.3	11.2
Kentucky--Statewide	2,224	2,686	9.7	10.6	10.3	10.0

TABLE 52

AVERAGE GRADE EQUIVALENCY SCORES IN LANGUAGE FOR ELEVENTH GRADE PUPILS BY SEX AND EDUCATIONAL DEVELOPMENT DISTRICT

Comprehensive Tests of Basic Skills, Form Q, Level 4

Educational Development District	Number of pupils		Average grade equivalency Language Mechanics		Average grade equivalency Language Expression		Average grade equivalency Spelling	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	123	158	9.7	11.8	10.3	11.0	10.1	11.5
2	141	179	9.9	11.3	9.5	10.8	9.2	11.0
3	41	85	10.6	11.4	10.1	10.7	9.9	11.2
4	208	244	9.4	11.2	9.5	10.8	9.8	11.5
5	137	159	10.0	11.3	9.5	10.8	9.7	11.5
6	88	97	9.8	11.1	9.6	10.5	9.4	10.8
7	207	264	10.2	11.1	10.1	10.7	11.4	10.4
8	134	250	11.7	12.3	11.9	12.3	11.4	12.3
9	120	134	9.8	11.1	10.0	10.6	10.2	11.5
10	82	108	10.8	11.2	10.9	11.0	10.7	11.4
11	98	113	9.7	11.1	9.1	10.4	9.3	10.9
12	224	235	8.6	10.9	8.1	10.1	8.8	10.8
13	299	314	9.3	10.9	8.8	9.8	9.2	10.9
14	129	114	9.4	11.1	9.8	10.3	9.6	11.2
15	167	192	10.0	11.0	10.0	11.1	10.0	11.5
16	23	37	8.5	11.7	8.4	10.5	8.5	11.0
Kentucky--Statewide	2,224	2,686	9.8	11.3	9.6	10.7	9.8	11.3

TABLE 53

AVERAGE GRADE EQUIVALENCY SCORES IN ARITHMETIC FOR ELEVENTH GRADE PUPILS BY SEX AND EDUCATIONAL DEVELOPMENT DISTRICT

Comprehensive Tests of Basic Skills, Form Q, Level 4

Educational Development District	Number of pupils		Average grade equivalency Arithmetic Computation		Average grade equivalency Arithmetic Concepts		Average grade equivalency Arithmetic Applications	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	123	158	10.4	10.9	11.3	11.1	11.0	10.5
2	141	179	9.9	10.2	10.6	10.3	10.5	10.0
3	41	85	10.1	10.3	10.5	10.8	11.0	10.0
4	208	244	9.4	9.8	10.1	10.4	10.7	10.1
5	137	159	9.6	10.1	10.4	10.2	10.4	9.8
6	88	97	9.9	9.9	10.8	10.0	10.8	9.6
7	207	264	10.5	10.4	11.0	10.7	11.2	10.1
8	134	250	12.2	11.4	12.5	12.2	12.5	11.5
9	120	134	9.8	11.1	10.0	10.6	10.2	10.5
10	82	108	10.6	11.2	10.9	11.0	10.7	11.4
11	98	113	9.6	9.7	10.4	9.9	10.4	9.4
12	227	235	8.9	9.8	9.5	10.0	9.8	9.7
13	299	314	9.5	9.6	10.0	9.7	10.2	9.4
14	129	114	9.6	10.0	10.0	10.0	10.8	10.0
15	167	195	9.9	10.6	10.6	10.6	10.5	9.9
16	23	37	7.9	9.8	9.1	10.0	9.8	9.6
Kentucky--Statewide	2,224	2,686	9.9	10.3	10.5	10.5	10.7	10.0

TABLE 54

AVERAGE GRADE EQUIVALENCY SCORES IN STUDY SKILLS FOR ELEVENTH GRADE PUPILS BY SEX AND EDUCATIONAL DEVELOPMENT DISTRICT

Comprehensive Tests of Basic Skills, Form Q, Level 4

Educational Development District	Number of pupils		Average grade equivalency Reference Materials		Average grade equivalency Graphic Materials	
	Boys	Girls	Boys	Girls	Boys	Girls
1	123	158	10.4	11.3	10.8	10.8
2	141	179	9.7	10.5	10.3	10.1
3	41	85	9.8	10.6	10.5	10.3
4	208	244	9.8	10.7	10.3	10.0
5	137	159	9.4	10.6	10.2	9.9
6	88	97	10.1	10.0	11.4	9.7
7	207	264	10.1	10.4	11.0	10.0
8	134	250	11.5	11.8	12.3	11.8
9	120	134	9.7	10.7	10.2	9.9
10	82	108	10.5	11.1	10.6	10.1
11	98	113	9.4	10.5	9.8	9.5
12	227	235	8.5	9.8	8.8	9.1
13	299	314	9.0	9.8	9.6	8.9
14	129	114	9.7	10.8	10.0	9.8
15	167	195	10.1	10.8	10.3	10.2
16	23	37	8.5	10.7	9.1	9.8
Kentucky--Statewide	2,224	2,686	9.7	10.6	10.3	10.0

TABLE 55

STATEWIDE PERCENTAGE OF POSITIVE RESPONSE FOR ELEVENTH GRADE PUPILS BY SEX FOR ATTITUDINAL STATEMENTS

Kentucky Student Attitude Inventory

Attitudinal area number and description	Statement number	Percentage of positive response All pupils	Boys	Girls
6.3.1 Attitude toward Self	1	92	91	93
	2	81	78	84
	3	84	81	86
	4	71	71	69
	5	87	86	89
	6	69	64	73
	7	53	45	59
	8	54	52	55
3.2.1 Attitude toward Peers	1	80	82	79
	2	94	94	95
	3	40	39	40
	4	61	64	69
	5	92	91	93
	6	86	86	86
	7	84	81	87
	8	63	66	62
1.8.1 Attitude toward School	1	41	35	61
	2	74	68	72
	3	39	28	48
	4	91	89	92
	5	57	40	70
	6	32	27	36
	7	51	50	51
	8	39	37	41
1.8.2 Attitude toward Reading	1	57	58	58
	2	40	40	40
	3	89	86	92
	4	57	60	54
	5	77	73	80
	6	86	85	87
	7	67	63	70
	8	88	88	90

TABLE 55 (continued)

STATEWIDE PERCENTAGE OF POSITIVE RESPONSE FOR ELEVENTH GRADE PUPILS BY SEX FOR ATTITUDINAL STATEMENTS

Kentucky Student Attitude Inventory

Attitudinal area number and description	Statement number	Percentage of positive response		
		All pupils	Boys	Girls
1.8.3 Attitude toward Arithmetic	1	51	54	49
	2	35	38	31
	3	30	34	87
	4	87	86	89
	5	54	57	51
	6	25	27	24
	7	32	35	30
	8	34	38	29
4.3.1 Attitude toward Citizenship Concepts	1	89	74	84
	2	83	83	83
	3	22	24	23
	4	84	86	83
	5	93	91	95
	6	87	86	88
	7	94	91	96
	8	83	80	85

APPENDIX F

ITEM ANALYSIS RESULTS BY SKILL/CONCEPT

TABLE 56

READING VOCABULARY ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Vocabulary Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.1.1 Knowledge of the meaning of words in context	1	95	94	97	94	98	96	96	96	97	93	93	95	94	75	92	95	97	92
	2	91	90	94	90	91	90	90	91	93	94	92	92	89	71	86	94	95	87
	3	88	89	89	90	88	92	92	90	93	93	92	92	81	71	86	90	88	92
	4	85	68	69	73	78	80	58	67	64	79	62	73	74	54	63	63	74	65
	5	88	86	89	88	89	90	87	86	89	93	86	91	81	64	82	85	88	92
	6	84	80	83	85	84	88	84	81	85	91	79	78	74	57	73	81	82	83
	7	87	83	89	85	86	86	83	84	88	93	84	88	87	59	77	84	82	83
	8	85	80	80	79	79	83	80	83	86	91	79	85	79	62	75	82	83	75
	9	65	71	75	73	70	73	69	69	73	77	77	73	81	57	66	71	72	65
	10	79	78	85	80	71	82	80	81	82	90	78	79	79	57	70	77	84	73
	11	73	75	77	78	85	77	78	76	81	80	79	76	82	55	72	73	73	68
	12	76	64	71	70	70	67	57	59	64	77	58	63	56	53	60	64	64	57
	13	88	84	87	88	94	87	82	85	89	89	85	88	84	61	82	86	84	83
	14	81	75	75	72	79	77	73	70	77	85	74	84	76	54	72	79	78	75
	15	80	75	78	76	78	80	74	66	79	88	73	76	71	54	72	78	80	78
	16	60	75	63	61	52	59	57	63	61	79	50	66	60	41	49	51	61	53
	17	80	75	71	76	64	80	78	78	80	79	73	76	69	57	77	78	78	77
	18	72	70	73	69	67	72	72	71	71	76	71	72	73	59	65	65	69	68
	19	68	76	79	79	68	79	76	79	80	85	75	84	79	56	72	71	79	82
	20	70	70	70	72	73	75	68	72	73	82	71	71	65	54	62	65	69	70
	21	75	72	74	71	75	72	69	65	78	90	71	79	68	53	61	74	76	77
	22	80	76	79	80	78	79	76	74	81	88	77	85	81	58	67	70	80	75
	23	70	65	71	67	66	71	63	65	69	86	66	69	63	42	53	56	72	58
	24	76	76	77	75	82	78	71	73	83	91	78	85	68	56	68	72	80	70
	25	64	59	66	65	58	64	62	65	63	70	56	63	65	32	51	48	64	48
	26	61	64	68	69	67	69	59	65	64	79	67	61	69	43	57	65	66	60
	27	62	55	59	51	47	55	56	48	59	62	54	61	55	46	51	59	61	53
	28	58	58	59	57	58	61	56	55	59	72	69	61	52	38	52	60	62	63
	29	42	52	51	53	56	67	54	56	46	62	46	48	53	41	46	52	48	48
	30	68	70	70	77	64	71	68	73	70	86	69	79	69	47	65	72	71	70
	31	79	81	81	80	85	85	82	79	81	92	83	86	73	58	75	86	83	80
	32	54	53	50	51	56	61	54	46	51	60	55	51	53	36	53	54	57	48
	33	65	65	72	63	71	70	63	61	68	77	67	71	68	43	57	61	68	60
	34	55	50	57	43	40	57	46	47	52	63	54	56	53	34	44	49	51	38
	35	40	46	44	48	45	55	47	43	49	64	42	51	55	33	37	41	49	45

TABLE 56 (continued)

READING VOCABULARY ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Vocabulary Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.1.1 Knowledge of the meaning of words in context (continued)	36	45	43	49	44	37	49	39	44	45	58	33	49	44	26	38	43	47	35
	37	63	67	74	74	69	71	66	70	66	80	65	68	71	47	59	66	71	62
	38	40	36	37	34	33	39	39	31	32	49	42	36	29	29	28	37	40	45
	39	33	36	37	33	35	41	38	35	40	45	31	36	35	29	29	35	37	32
	40	30	29	27	30	28	31	25	22	27	40	31	34	24	23	25	26	31	32

TABLE 57

READING COMPREHENSION ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.2.1 Comprehension (paraphrasing) of the meaning of ideas	7	84	84	86	85	85	84	84	89	84	90	87	88	90	61	82	82	85	83
	11	73	73	75	79	75	77	76	72	78	83	75	76	68	52	66	71	74	70
	12	85	83	87	86	82	83	84	86	87	91	85	84	84	63	80	85	86	83
	19	81	82	86	80	84	84	78	85	86	91	82	86	81	59	78	86	88	83
	21	83	84	85	87	80	85	84	84	84	89	82	84	81	69	84	93	86	80
	22	92	89	91	90	94	92	88	92	93	93	91	91	90	67	89	91	94	90
	23	84	83	84	82	87	85	80	84	88	90	83	88	82	61	78	84	84	92
	30	78	79	83	82	83	81	79	77	84	86	83	81	74	63	76	73	84	67
	31	76	79	80	82	78	81	73	79	79	88	82	85	76	58	78	79	82	80
	33	56	60	70	60	52	58	57	61	60	75	60	58	60	46	59	62	58	65
	37	71	75	76	75	83	81	75	75	78	85	76	73	71	54	71	73	80	72
1.1.2.2 Comprehension of main ideas	8	78	76	76	78	76	76	75	74	84	79	74	81	76	59	78	76	77	80
	9	75	70	71	71	69	70	70	63	73	77	73	68	73	56	67	76	75	77
	14	93	91	92	92	91	92	92	93	97	93	92	94	89	72	92	93	92	90
	15	68	64	66	63	60	68	67	68	64	74	65	68	73	45	58	63	69	72
	28	86	83	85	85	86	85	82	85	87	91	83	87	81	62	80	81	85	90
	34	73	78	79	83	85	84	73	80	79	85	81	77	76	63	72	77	79	90
	40	51	52	57	53	50	53	51	52	55	61	51	56	40	39	50	49	50	60
	45	67	73	75	74	79	78	76	70	76	81	70	66	77	56	69	63	77	62
1.1.2.3 Comprehension of relationships	1	75	73	70	75	81	72	73	72	75	79	71	73	74	58	72	77	76	87
	29	77	77	77	77	80	82	77	78	79	83	81	84	71	60	69	72	83	73
	32	78	77	81	81	77	82	78	77	76	84	75	86	81	58	73	75	74	87
	36	78	80	83	82	84	82	79	79	85	90	80	81	82	61	76	77	85	83
	44	54	60	61	58	60	61	61	59	61	69	64	56	71	50	54	63	64	48
1.1.2.4 Comprehension (draw conclusions) of given facts and statements	10	50	50	55	49	50	55	45	43	51	59	47	54	66	37	45	47	52	52
	13	75	77	81	79	81	80	77	79	79	84	75	82	81	53	74	71	81	72
	24	59	62	62	69	63	65	65	58	67	71	56	68	52	48	53	64	67	68
	25	67	74	77	80	71	77	69	68	77	86	75	83	79	55	69	71	79	70
	26	58	64	74	70	57	64	57	59	66	72	67	64	68	54	57	60	66	67
	27	58	65	70	68	60	70	65	56	65	74	62	70	65	49	59	65	71	72
1.1.2.5 Comprehension (inference) of contextual clues	2	76	80	86	79	83	77	80	83	77	85	80	79	84	65	76	86	85	90
	4	51	48	47	47	46	50	51	42	51	57	49	50	63	36	42	49	53	53
	5	85	81	83	80	86	83	85	82	82	85	80	86	81	62	80	83	82	75

TABLE 57 (continued)

READING COMPREHENSION ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Reading Comprehension Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.2.5 Comprehension (inference) of contextual clues (continued)	41	48	56	59	52	61	63	56	52	61	65	57	62	50	43	49	57	61	48
	42	57	65	68	70	64	67	60	59	66	72	69	68	69	52	62	69	68	65
1.1.2.6 Analysis of indefinite or incomplete statements (extended meaning)	3	73	75	74	75	83	74	80	74	80	79	72	78	79	58	73	79	77	70
	6	48	51	55	[illegible]	44	55	54	55	55	60	55	48	56	39	45	45	54	53
	18	60	58	58	56	68	61	55	56	61	63	62	68	37	46	51	60	61	57
	35	68	70	75	69	75	74	68	74	71	77	68	74	68	47	71	64	76	65
	43	45	49	52	48	54	54	47	50	50	58	49	49	68	33	46	44	49	58
1.1.2.7 Analysis of the tone, mood, and intention of the author	16	70	70	73	73	75	73	69	71	71	74	69	73	73	54	67	73	70	68
	17	79	73	73	78	75	75	71	71	79	77	72	81	66	51	69	78	79	77
	20	61	55	59	51	53	55	52	58	56	66	54	69	56	39	49	56	57	67
	38	35	40	37	41	42	39	45	40	44	43	47	42	35	29	40	38	38	35
	39	51	56	60	55	66	60	55	51	56	66	52	61	66	45	50	56	56	42

TABLE 58

LANGUAGE/SPELLING ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language/Spelling Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.3.1 Knowledge of correctly and incorrectly spelled words	1	85	83	88	81	83	88	83	77	85	92	83	84	81	60	81	86	88	73
	2	93	92	93	90	98	93	96	91	97	95	92	96	85	70	92	92	94	90
	3	91	85	90	84	90	88	83	87	90	88	85	89	76	67	83	84	90	82
	4	88	87	89	86	88	92	89	87	92	94	84	91	84	70	85	85	91	87
	5	78	78	82	81	80	84	76	77	80	82	77	83	69	59	80	77	76	85
	6	79	79	80	76	80	79	82	76	82	89	83	80	69	61	77	77	84	70
	7	81	83	83	80	91	89	87	77	85	85	84	83	85	63	82	84	87	77
	8	88	90	89	88	92	94	94	89	92	95	89	94	87	67	88	93	94	87
	9	62	62	62	62	63	62	73	56	59	68	62	71	66	48	58	64	60	63
	10	85	82	80	79	86	78	84	63	87	89	86	87	74	63	81	82	87	85
	11	72	66	71	63	71	65	65	61	70	72	70	71	65	52	62	65	68	55
	12	62	56	61	50	59	60	62	52	59	66	57	57	52	43	52	55	53	55
	13	57	60	61	56	60	58	64	62	67	71	65	66	52	39	54	60	62	62
	14	67	67	67	59	72	64	67	66	72	78	70	74	61	49	65	59	73	67
	15	77	77	76	77	75	79	86	75	80	86	75	79	79	56	75	77	84	77
	16	65	69	70	70	71	72	70	65	70	79	71	77	53	45	64	70	74	63
	17	60	64	69	59	71	69	69	[illegible]	65	65	65	61	73	54	61	65	67	60
	18	61	52	63	66	62	66	65	62	62	71	56	62	52	43	57	66	64	52
	19	57	56	57	55	56	61	58	54	60	64	57	56	48	39	53	61	53	65
	20	77	79	80	78	79	82	78	76	83	87	81	85	73	61	76	82	80	65
	21	52	50	51	45	56	51	56	45	49	59	54	41	45	37	47	45	56	50
	22	60	60	60	61	66	62	59	55	64	74	61	68	55	40	54	57	65	55
	23	53	49	54	47	59	51	49	39	54	50	50	55	47	37	46	51	49	43
	24	49	47	46	45	56	47	53	44	48	59	51	50	29	37	40	49	51	37
	25	63	63	62	61	63	63	67	62	66	79	67	69	56	43	52	62	69	62
	26	61	62	64	63	66	62	73	50	67	76	67	68	52	42	53	56	67	62
	27	44	39	38	38	45	43	43	36	41	44	37	50	29	32	37	38	39	32
	28	68	68	67	66	71	71	67	59	72	79	71	72	74	51	63	61	73	60
	29	51	47	52	51	46	53	41	43	52	51	50	48	39	35	43	50	49	32
	30	24	30	32	27	27	37	28	25	28	38	32	33	32	22	29	34	25	32

TABLE 59

LANGUAGE MECHANICS ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Mechanics Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.4.1 Application of punctuation skills	1	37	52	52	51	60	48	53	52	53	62	51	45	50	46	55	48	51	45
	2	89	84	85	88	84	84	88	86	89	87	80	85	82	63	84	85	87	87
	3	64	61	64	67	62	63	63	59	65	74	57	59	56	43	55	59	63	63
	4	62	63	62	69	71	66	62	63	71	60	54	64	58	46	63	64	65	67
	5	84	82	83	84	87	82	85	81	84	88	82	88	85	59	82	77	87	90
	6	68	70	71	73	76	75	69	71	69	73	74	65	69	52	70	66	75	78
	7	75	69	65	65	68	70	70	68	74	75	71	70	63	58	71	69	70	63
	8	75	75	78	80	74	76	80	71	76	87	67	76	79	60	68	76	75	68
	9	48	51	54	54	54	47	48	49	54	64	57	55	48	35	44	48	54	45
	10	71	66	67	69	75	65	67	64	71	69	66	74	55	49	67	62	69	65
	11	87	82	86	86	82	83	83	81	85	92	81	88	82	58	79	82	86	78
	12	88	83	88	86	87	85	80	83	87	88	77	85	84	63	81	84	86	90
	13	84	80	82	85	83	84	82	78	84	84	80	79	84	60	78	77	85	83
1.1.4.2 Application of capitalization skills	14	68	67	69	66	73	72	76	64	60	72	70	76	65	50	66	70	68	73
	15	76	76	80	76	79	74	81	76	79	86	77	79	79	54	73	75	78	72
	16	85	87	87	87	94	88	90	87	92	92	86	88	87	65	86	86	88	85
	17	80	81	81	84	88	82	80	83	84	90	81	89	77	57	76	82	86	75
	18	32	39	38	40	43	40	43	46	43	40	42	39	37	29	37	41	39	37
	19	36	35	32	33	44	38	46	42	36	36	34	41	42	22	35	36	25	33
	20	63	69	72	70	75	70	76	61	68	79	69	75	66	51	65	74	71	72
	21	72	82	85	82	86	82	86	82	84	88	81	87	81	65	81	81	84	82
	22	51	55	57	58	58	57	62	54	53	71	55	63	50	38	48	53	52	58
	23	59	57	71	67	67	62	67	73	67	77	67	72	76	49	60	68	73	68
	24	65	78	79	79	87	76	81	77	79	85	82	85	84	63	71	81	78	75
	25	57	61	60	60	75	59	68	57	63	68	56	72	63	48	58	66	59	60

TABLE 60

LANGUAGE EXPRESSION ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Language Expression Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.5.1 Application of correct grammatical usage	26	78	79	82	80	86	84	79	77	83	89	79	82	84	60	71	76	83	77
	27	68	68	67	67	68	71	69	69	67	78	72	73	73	48	65	64	69	63
	28	68	62	65	54	57	60	60	64	65	72	56	71	73	48	59	59	69	62
	29	62	65	61	69	69	62	69	64	70	72	64	69	71	51	58	69	69	65
	30	84	79	82	82	82	81	77	79	84	86	77	81	84	56	81	76	84	78
	31	74	74	70	73	74	80	72	75	77	79	75	78	82	58	72	72	75	77
	32	85	83	85	82	87	86	83	85	88	84	78	84	87	62	82	84	91	85
	33	78	75	75	75	79	79	76	72	79	84	79	80	79	55	68	72	83	80
	34	68	62	65	64	64	63	65	58	66	61	64	69	65	48	61	61	61	52
	35	73	76	82	77	76	80	78	78	81	81	75	76	81	54	71	73	82	65
1.1.5.2 Comprehension of clarity and/or economy of expression	46	79	78	78	80	79	80	78	81	79	88	75	80	81	55	75	78	82	77
	47	87	85	86	84	86	85	89	88	89	90	84	85	87	64	84	85	87	85
	48	79	79	85	79	80	79	81	82	80	83	75	86	82	55	77	78	84	80
	49	88	85	90	83	90	88	86	90	88	89	85	89	89	63	84	82	90	88
	50	55	62	67	63	63	63	69	56	62	72	64	61	61	41	60	60	66	52
	51	33	36	30	39	33	36	37	39	35	52	32	37	37	28	31	28	37	40
	52	32	33	33	30	40	35	43	30	32	43	38	35	26	28	26	32	33	20
	53	37	31	28	28	33	34	34	28	30	44	35	31	37	21	26	23	33	28
	54	51	50	48	47	53	60	46	43	53	67	51	54	58	38	39	38	57	47
	55	45	48	49	54	44	48	45	47	49	56	50	53	39	35	45	48	47	50
1.1.5.3 Comprehension of the author's intention (word choice)	36	87	89	90	89	93	91	91	92	96	90	84	89	89	67	89	89	92	80
	37	90	88	90	88	92	90	84	91	94	93	90	95	77	64	88	90	92	85
	38	76	74	77	73	77	77	77	75	79	80	78	84	87	56	60	70	80	70
	39	78	78	82	77	81	81	81	82	81	78	76	84	71	54	81	78	80	82
	40	65	55	65	53	62	56	52	51	58	77	52	71	56	35	43	48	58	48
	41	71	73	77	76	81	74	70	71	78	82	74	81	81	54	62	72	78	75
	42	56	57	56	57	60	63	65	60	58	61	61	64	61	44	49	59	60	57
	43	71	69	73	72	71	71	73	71	70	84	67	78	79	46	61	68	73	67
	44	65	60	63	65	70	66	60	62	63	76	56	68	61	40	48	57	61	58
	45	48	47	51	49	42	48	51	40	46	60	52	54	40	34	41	48	43	43

TABLE 61

ARITHMETIC COMPUTATION ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.6.1 Application of addition skills	1	96	93	97	93	98	96	99	96	98	92	96	98	90	75	83	96	97	97
	2	82	79	84	80	85	81	82	83	87	82	79	81	85	62	70	79	80	82
	3	82	78	86	80	82	83	80	77	85	84	82	77	81	59	73	69	78	78
	4	80	68	74	67	66	69	75	65	70	81	70	74	74	55	55	73	71	63
	17	84	78	85	79	85	78	80	80	87	87	86	78	74	60	64	84	80	73
	18	80	74	81	78	78	78	72	75	81	86	71	74	76	55	59	74	82	67
	19	77	67	70	71	71	70	69	66	75	79	69	64	71	49	55	67	67	67
	20	72	63	72	65	66	69	61	63	66	78	67	59	58	50	49	65	67	53
	33	76	64	69	62	67	68	66	62	72	78	70	67	63	53	51	61	65	55
	34	73	69	69	68	66	68	68	79	73	75	67	69	56	58	64	69	73	63
	35	79	74	82	68	78	75	75	71	82	84	86	79	58	53	62	76	82	73
	36	35	31	32	32	32	34	28	23	33	58	27	36	32	23	19	16	37	22
1.1.6.2 Application of subtraction skills	5	80	81	83	84	86	82	87	79	88	86	83	78	81	61	72	81	91	80
	6	82	78	85	78	82	81	77	77	86	85	81	76	77	61	66	80	90	75
	7	76	69	76	67	71	67	72	69	74	80	71	65	74	55	58	61	88	58
	8	78	67	72	67	70	70	70	64	74	74	67	67	73	53	58	71	84	57
	21	62	56	62	61	54	59	57	55	63	62	54	57	55	41	46	61	86	55
	22	71	67	75	70	83	71	67	65	74	79	68	73	65	51	52	56	77	53
	23	86	77	86	79	81	78	78	77	80	87	82	81	77	55	64	84	62	65
	24	63	58	63	59	63	62	56	59	63	70	61	53	56	44	48	59	82	50
	37	77	77	83	75	79	83	76	77	82	88	80	79	74	54	68	80	63	70
	38	52	49	60	48	49	50	45	49	52	71	45	56	40	33	36	36	57	32
	39	45	43	48	43	44	47	38	39	47	67	41	45	32	36	31	30	77	30
	40	40	88	94	88	94	90	92	94	94	92	93	91	77	67	76	92	82	90
1.1.6.3 Application of multiplication skills	9	89	85	93	88	88	89	90	86	90	88	89	87	85	67	74	86	90	80
	10	90	85	92	87	88	89	89	86	92	87	91	89	84	63	74	87	87	87
	11	87	82	85	86	86	85	81	86	88	86	87	84	84	62	71	85	89	90
	12	86	80	87	84	84	83	82	78	87	86	82	77	73	63	71	86	77	78
	25	89	77	82	84	80	79	81	81	83	84	78	74	79	58	65	79	88	70
	26	78	75	79	78	78	80	76	75	81	86	79	73	76	52	64	74	65	73
	27	74	59	63	61	55	60	56	60	64	74	65	56	58	47	50	57	67	53
	28	80	72	78	75	72	73	70	75	73	82	78	73	65	53	61	76	50	67
	41	70	62	68	64	63	64	65	69	66	73	67	58	50	49	54	60	53	45
	42	56	58	65	59	69	59	54	57	62	71	61	61	56	45	44	55	58	53

TABLE 61 (continued)

ARITHMETIC COMPUTATION ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Computation Subtest

Skill/concept number and description		Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.6.3	Application of multiplication skills (continued)	43	73	72	83	73	79	71	73	76	74	87	72	72	66	53	60	72	77	62
		44	73	71	81	68	83	73	73	74	74	82	72	76	63	52	59	70	82	65
1.1.6.4	Application of division skills	13	89	86	88	91	92	87	88	90	93	89	89	84	85	66	78	86	90	85
		14	88	84	89	90	94	90	86	76	92	90	84	84	87	67	73	80	87	87
		15	84	82	88	83	84	91	87	85	86	89	86	85	74	63	69	80	89	75
		16	82	74	79	76	82	73	73	69	80	78	75	76	73	64	66	77	77	73
		29	88	83	89	82	90	87	84	83	87	88	86	84	76	65	71	88	88	83
		30	72	64	75	67	72	63	58	60	75	74	73	64	63	44	54	65	65	43
		31	74	63	70	72	64	61	61	61	69	76	71	57	53	47	54	69	67	40
		32	55	49	57	57	56	54	41	44	60	60	51	49	47	33	38	48	50	25
		45	60	52	58	53	56	52	50	54	58	67	57	51	45	39	43	49	53	42
		46	60	57	66	58	56	57	57	52	61	69	63	54	50	47	48	54	58	47
		47	61	55	66	52	61	58	55	54	55	74	61	51	52	41	41	58	60	42
		48	48	47	61	44	49	46	49	41	45	61	52	56	37	39	36	47	52	28

TABLE 62

ARITHMETIC CONCEPTS ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Concepts Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.7.1 Knowledge of arithmetic concepts	4	86	85	89	85	82	87	90	83	90	89	88	82	87	63	81	91	89	80
	8	65	65	72	62	67	65	55	53	69	80	68	72	63	45	63	66	70	57
	13	67	69	79	69	73	71	69	68	70	83	67	69	69	49	63	66	72	68
	22	55	53	54	53	55	58	51	52	54	69	54	52	56	40	48	45	53	43
	25	52	55	63	53	61	62	52	53	57	68	51	61	52	41	44	57	55	45
	27	55	58	63	59	71	59	54	58	62	75	60	57	56	45	47	53	65	43
	29	38	42	47	43	44	46	35	37	48	50	41	42	24	26	39	45	45	30
1.1.7.2 Comprehension of arithmetic concepts (converting form)	7	80	77	79	77	82	80	79	78	84	84	78	77	81	58	72	68	73	80
	10	83	79	86	80	82	79	79	74	81	90	75	78	77	60	78	78	84	75
	11	78	76	78	76	78	80	75	76	80	84	78	71	77	58	73	77	73	75
	19	75	66	67	66	67	68	67	63	72	76	72	73	66	54	59	58	69	63
	30	35	40	43	40	50	48	33	39	45	51	43	28	37	29	33	35	39	28
1.1.7.3 Comprehension of equations	6	41	36	38	32	30	37	36	32	40	57	31	39	26	24	33	24	42	32
	9	84	83	90	82	90	84	85	83	84	90	87	83	82	62	78	81	85	82
	14	80	79	87	75	81	79	80	81	81	90	79	81	74	59	74	79	84	75
	20	64	61	66	57	61	66	57	61	64	74	66	62	55	38	56	54	63	52
	24	58	60	66	60	60	63	59	53	61	78	63	57	58	45	52	57	65	58
1.1.7.4 Comprehension of comparative relationships	1	94	92	95	92	98	94	91	93	95	93	92	95	92	75	93	93	96	95
	2	87	84	88	84	87	87	86	79	85	88	82	84	84	65	83	88	86	77
	3	89	87	91	88	94	89	91	85	91	86	89	87	85	68	87	86	88	92
	12	79	79	84	82	79	82	78	81	85	88	80	79	71	58	73	82	83	68
	16	61	60	62	66	58	58	58	59	65	62	62	59	55	45	59	67	62	58
1.1.7.5 Analysis of the components of arithmetic problems (organization)	5	86	79	86	77	78	82	86	85	84	89	79	83	81	60	70	80	77	77
	15	80	80	84	79	83	85	82	79	86	88	82	77	77	62	73	82	83	87
	17	70	65	74	68	63	65	64	66	69	73	65	63	63	50	63	74	63	50
	18	65	68	73	72	67	73	62	69	69	86	67	75	66	50	61	64	74	57
	21	90	89	92	88	91	93	90	89	94	94	89	89	84	66	88	91	93	82
	23	29	28	29	31	25	36	37	24	32	44	27	24	24	17	18	24	28	20
	26	59	59	66	57	60	63	57	59	60	73	51	59	60	39	54	57	65	50
	28	47	45	49	49	52	52	45	43	51	61	48	36	40	33	32	41	49	38

TABLE 63

ARITHMETIC APPLICATIONS ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Arithmetic Applications Subtest

Skill/concept number and description		Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.8.1	Comprehension of relationships (ratio, time, part-whole, sequence, geometric)	31	89	86	90	84	90	87	86	89	92	89	85	85	94	67	82	91	86	85
		32	77	74	77	73	75	74	72	70	79	83	71	76	74	59	72	80	76	68
		37	71	68	73	67	67	69	69	66	72	80	69	69	73	48	63	73	72	55
		38	74	73	76	74	80	74	67	70	79	84	71	66	65	57	68	74	75	73
1.1.8.2	Comprehension of problem-solving (selecting methods)	33	82	77	81	78	78	82	[illegible]	77	80	87	76	83	68	57	71	83	80	73
		40	71	68	69	68	71	69	69	68	73	78	66	66	68	49	67	71	67	65
		41	77	77	81	79	82	76	78	79	79	85	83	77	74	57	74	76	81	75
		42	64	52	49	51	46	52	59	54	54	67	53	47	47	41	45	52	51	52
		44	60	63	61	66	62	64	67	62	61	72	60	66	65	47	59	76	60	68
1.1.8.3	Comprehension of problem-solving (correct solution)	36	63	68	72	66	65	74	71	66	71	71	68	71	66	54	64	66	71	68
		43	77	73	75	78	78	70	73	70	78	85	75	73	61	55	68	76	73	65
		46	65	65	71	69	67	68	54	60	69	74	65	63	65	48	63	66	64	60
		47	48	52	55	52	54	58	46	49	56	60	58	43	52	41	50	47	51	35
		50	53	52	54	45	52	59	53	51	56	64	59	46	50	46	43	59	50	42
1.1.8.4	Analysis of the components of arithmetic word problems	34	77	68	73	71	72	69	65	67	73	82	68	68	58	53	60	65	70	67
		35	78	77	81	78	79	78	80	77	80	86	77	78	81	59	72	77	80	75
		39	69	69	71	74	68	70	69	64	71	80	66	68	76	51	68	72	70	65
		45	64	61	60	60	63	62	61	64	66	74	62	59	60	44	56	69	64	52
		48	42	49	49	45	44	52	43	46	56	57	47	46	47	39	47	57	44	38
		49	62	61	67	61	63	60	57	54	66	70	67	63	73	49	57	64	61	53

TABLE 64

STUDY SKILLS/REFERENCE MATERIALS ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Reference Materials Subtest

Skill/concept number and description	Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.9.1 Knowledge of dictionary use	16	80	79	84	81	87	82	84	52	84	90	83	83	84	61	73	72	90	83
	17	88	86	89	87	92	91	91	55	92	93	89	86	92	67	84	78	92	82
	18	82	78	84	84	83	82	80	50	81	89	82	85	85	58	74	70	84	72
	19	71	70	78	73	75	78	71	48	73	86	72	77	73	54	61	60	74	62
	20	63	57	60	59	67	[illegible]	63	37	64	66	63	72	66	43	60	55	65	57
1.1.9.2 Knowledge of library use	1	56	91	94	94	97	93	94	59	96	94	93	95	92	72	94	80	95	98
	2	33	75	79	77	80	77	79	50	84	84	80	77	76	57	71	71	79	80
	3	42	75	81	78	76	78	79	50	79	74	80	86	79	61	72	68	84	73
	4	07	13	12	14	15	10	15	08	13	08	12	13	11	13	16	11	15	17
	5	68	73	79	76	78	73	77	50	77	90	78	78	76	56	69	65	77	63
	6	69	82	89	86	85	89	85	52	89	90	88	86	92	59	76	70	89	90
	7	52	45	48	50	40	57	39	29	54	47	50	48	60	32	42	43	47	43
	8	56	51	56	52	50	55	55	31	53	60	49	61	56	41	50	42	53	50
	9	60	69	79	76	68	81	69	48	72	81	63	75	56	49	64	60	72	68
	10	74	78	78	84	89	85	83	48	82	85	79	74	74	58	79	66	81	78
	11	63	49	59	56	47	55	49	28	47	55	52	61	60	38	44	39	56	53
	12	47	78	84	82	87	84	79	51	79	90	78	82	85	56	75	65	83	80
	13	63	75	81	78	83	81	[illegible]	49	77	85	79	76	76	54	70	63	82	75
	14	56	55	59	54	58	63	56	29	55	68	59	71	55	32	52	42	62	60
	15	38	69	73	73	67	72	78	43	72	79	72	83	84	55	61	60	75	77

TABLE 65

STUDY SKILLS/GRAPHIC MATERIALS ITEM ANALYSIS INFORMATION--PERCENTAGE CORRECT BY EDUCATIONAL DEVELOPMENT DISTRICT FOR ELEVENTH GRADE

Comprehensive Tests of Basic Skills, Form Q, Level 4
Study Skills/Graphic Materials Subtest

Skill/concept number and description		Item number	Criterion percentage correct	Kentucky percentage correct	Percentage correct by Educational Development District															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.1.10.1	Comprehension of symbols, legends, and data presented in graphic and tabular form	25	63	60	68	64	59	63	58	39	64	72	57	64	60	49	59	51	59	63
		27	39	40	42	41	33	44	45	23	41	47	37	51	53	41	35	33	44	35
		32	68	61	63	67	66	62	73	42	61	67	64	66	66	51	59	53	63	60
		37	68	67	69	68	73	70	73	45	76	72	67	63	61	51	66	60	76	80
		49	38	34	35	33	45	39	37	23	37	38	37	35	40	25	31	28	35	32
1.1.10.2	Comprehension of relationships presented in graphical form	21	87	84	88	89	91	88	93	52	88	91	85	90	90	65	80	75	92	85
		24	53	56	63	58	63	59	59	35	60	70	56	58	61	45	44	52	62	55
		26	62	63	68	63	67	65	67	38	68	69	66	73	65	46	60	53	67	62
		28	80	77	81	79	79	83	82	49	84	86	76	80	81	59	75	66	78	68
		30	50	49	53	51	45	56	48	33	54	60	54	57	45	36	40	43	48	50
		41	67	70	72	75	78	75	74	43	76	78	74	63	79	50	65	65	78	72
		42	82	82	84	84	89	88	82	55	90	90	86	82	79	60	81	73	89	83
		43	75	65	72	67	79	66	64	42	65	65	73	62	79	47	69	66	72	73
		44	56	56	62	62	56	60	53	32	62	66	54	63	65	48	48	51	60	63
1.1.10.3	Comprehension (draw conclusions) of graphic data	22	79	80	84	83	84	85	83	50	85	88	79	89	79	64	76	74	83	83
		23	77	78	83	84	85	82	83	46	82	86	77	79	79	60	75	69	85	70
		29	62	62	68	65	67	66	68	43	63	72	63	66	56	46	58	47	67	72
		31	85	82	86	82	88	86	86	54	89	90	84	88	82	65	81	70	89	85
		33	49	42	44	43	44	44	50	30	44	49	47	40	50	31	39	39	43	47
		36	18	33	22	20	22	23	19	09	27	31	22	26	23	18	18	16	29	18
		40	79	78	83	83	87	85	82	51	87	90	79	83	82	55	69	72	85	80
		46	46	48	55	45	46	52	53	30	54	57	50	51	47	35	43	36	53	32
		47	66	69	75	69	83	76	75	45	75	83	68	68	77	48	63	60	71	53
		48	53	59	61	60	65	65	63	38	66	69	81	59	53	47	54	56	64	50
		50	19	20	22	19	19	24	27	09	22	29	20	27	21	15	16	14	20	18
1.1.10.4	Analysis of graphical data and determination of extended meaning	34	47	47	53	53	45	47	45	36	53	56	41	44	50	36	44	39	56	53
		35	52	52	56	55	57	56	56	32	53	65	54	48	58	42	49	39	57	50
		38	82	76	80	75	75	81	85	50	85	88	75	78	81	52	73	70	83	70
		39	41	41	46	43	37	40	42	30	47	52	38	41	45	30	37	37	49	33
		45	68	64	67	64	62	67	68	37	70	79	64	65	53	48	59	62	72	53